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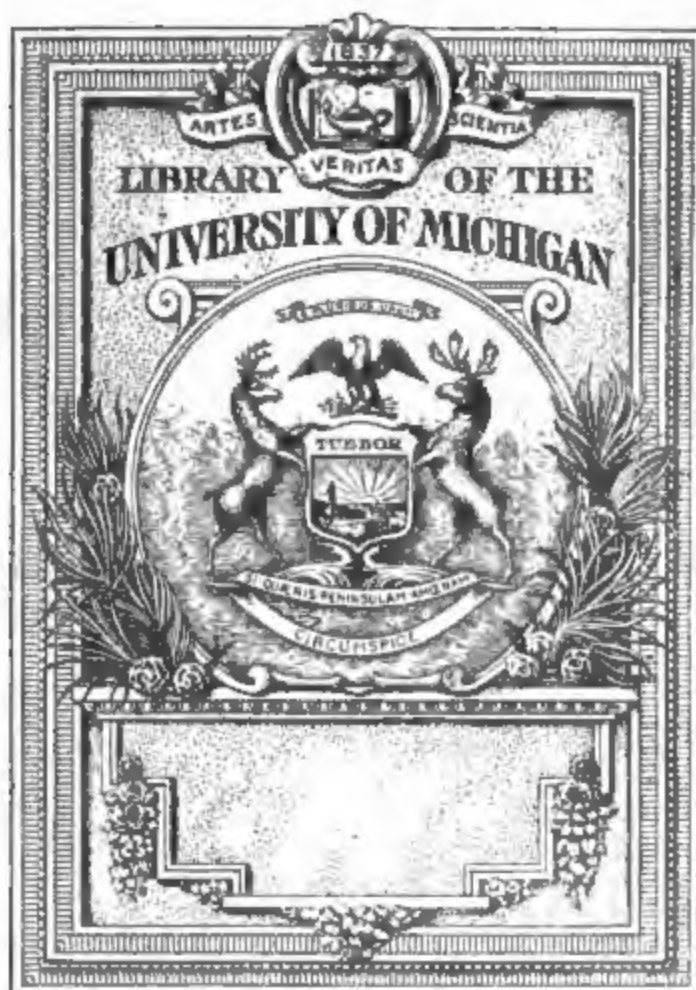
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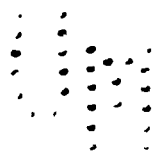
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THE
NORTH BRITISH REVIEW.

MAY, 1851.

ART. I.—*Revue des deux Mondes*. Paris, 1849 and 1850.

FRANCE is, *κατ' ἐξόχην*, the land of experiment, as England is the land of compromise. There is scarcely a religious, political, or social experiment she has not tried; scarcely a religious, political, or social phase which she has not passed through. The form of Romanism in its narrowest and harshest bigotry which she exhibited towards the close of the reign of Louis XIV., was exchanged under his successors for a wild, angry, aggressive infidelity. This in its turn was succeeded by a cold and contemptuous indifference, which is now giving place to a somewhat more hopeful spirit in the poetical and mystical faith of Lamennais and Lamartine among the adherents of the old creed, and to the stiff and dogmatic opinions of Guizot, Coquerel, and Quinet among the votaries of the new. In polity France was at one time a military aristocracy, when the Guises and the Condés were almost the equals of the reigning Prince. Richelieu, Mazarin, and Louis XIV. curbed the power of these rival potentates, and established a central and relentless despotism, which lasted till 1789, and was then followed in rapid succession by the most democratic of republics and the most stern of military empires,—by a restoration, a second revolution, a constitutional limited monarchy, a third revolution, and an anomalous, ambiguous, tottering republic. The social changes which the country has undergone have been no less startling. Vassals and serfs till sixty years ago, the people suddenly became, first, the equals, then the tyrants of their former masters; and after losing their power under the empire, and being firmly repressed under the

succeeding dynasties, they saw Communism for one short period actually triumphant and in power, and are still struggling to replace it at the Luxembourg. The middle classes, non-existent or insignificant under the old monarchy, and unwisely despised by Napoleon, have been dominant since 1830, and promise to remain so still; while the aristocracy, formerly the proudest and mightiest in Europe, have sunk into apparently hopeless impotence, retaining even their titles with difficulty, and in occasional abeyance. Hitherto, in all the manifold forms which her Government and her society have assumed, France has been almost equally unfortunate: she has travelled round the whole circle of national possibilities, and like Milton's Satan, has contrived constantly "to ride with darkness."

When the Revolution of 1848* once more summoned her to the task of reconstruction, that task was far more difficult than at any former period. In 1789 her course was comparatively clear, and her materials comparatively rich. There were scandalous and universally recognised abuses to be removed; enormous grievances to be redressed; shameful oppressions to be cancelled; and rights long and cruelly withheld to be conferred. There might be danger in all these changes; but the changes were rendered necessary by decency and justice; and the necessity was clearly seen. The old theories of Government and society were to be swept away, but the new ones had been long ready to take their place. Men might be mistaken as to the value of the objects they had at heart, and might overestimate the advantages which were to flow from their attainment; but they had no doubt or confusion as to what these objects were. They knew what they wanted. The enthusiasm of the Reformers might be irrational, and their faith fanatical; but they *had* a faith and an enthusiasm as earnest as ever carried martyrs unflinching to the stake. They had a new political framework to construct, but they had the constituent elements of that framework ready to their hand: they had an existing though a damaged monarchy; they had an aristocracy, frivolous, corrupt, and haughty, but still retaining some of the better elements of nobility within its bosom, and numbering many generous and worthy men among its ranks; and they had a *tiers-état*, indignant at past oppressions, thirsting for the promised freedom, energetic, trusting, simple, and with a loyalty not yet utterly extinguished. The court, the clergy, the high nobility were discredited and corrupt; but corruption had not yet penetrated the heart of the common people. They had a hard task to fulfil, but the means of its accomplishment were within reach: there was devotion, energy, and zeal in ample

* See this *Review*, vol. ix. pp. 1-42.

measure—there was high virtue and aspiring genius—there was eloquence of the loftiest order, and courage tried in many a conflict, all girding up their loins and buckling on their armour for the struggle.

In 1799, the task was a clearer and a ruder one still—it was simply to replace an anarchy of which all were sick and weary, by a strong government of any kind. In 1830, it was simply to enthrone a monarch who would govern according to the law, in the place of one who sought to govern by his own foolish and wicked will. But in 1848, when to the amazement of all and with scarcely any note of warning, the monarch fled and the dynasty and the constitution crumbled away like dust; and when the social as well as the political structure seemed to be resolved into its original elements, France saw before it a labour of a far more Herculean cast, surrounded with far more formidable difficulties, and demanding a profounder wisdom. It was not the reconstruction of a shattered cabinet—it was not the restoration of a fallen dynasty—it was not even the reform and purification of a partial and perverted constitution:—it was the re-edification of society itself,—of a society corrupt to its very core,—in which all the usual constituents of the social edifice were poisoned, damaged, discredited, or non-existent—in which the monarchy was despised—in which the aristocracy was powerless—in which the clergy was without influence or general respect—in which the leading politicians could not furnish forth a single man able to command the confidence of the people—in which the middle classes were hopelessly selfish and devoted to material interests, and the mass of the lower orders were enduring severe privations, and swayed to and fro by the wildest theories and the most impracticable aspirations.

The purely political difficulties which presented themselves to the reconstructing statesmen of 1848, were the least they had to encounter. Yet these were embarrassing enough. When James II. abdicated or was dismissed from the English throne in 1688, he had only one rival and possible successor. The nation, too, as far as it could be said to be divided at all, was divided between the adherents of James and those of William of Orange. The old parties of Cromwell's days were extinct or powerless. But in France there were, and are still, four distinct parties,—any two of them capable by their junction of paralyzing and checkmating the others,—any three of them, by their union, able to overpower and drive out the fourth. There were the old Legitimists, who acknowledged no monarch but the exiled Count de Chambord; not strong in numbers, or in influence, or in genius; inexperienced and unskilful in political action, and singularly defective in political sagacity; strangely blind to the

signs of the times ; living in dreams of the past and visions of the future ;—but strong in this one point, that they alone of all the parties which divided France, had a living political faith, firm religious convictions, earnest ancestral and traditional affections, a distinct principle to fight for, and an acknowledged banner to rally round. Though not numbering many adherents or vassals even in the remoter and less altered provinces, their position in society as the undoubted heads of the polite and fashionable world, and embracing the oldest and most respected families of the ancient aristocracy, gave them a certain influence which, much as the prestige of high birth has been dissipated in France, was still not inconsiderable.

Next to them came the Imperialists—those whom recollections of former glory, and worship of the memory of the most wonderful man of modern times, attached to anything that bore the name or the impress of Napoleon. Their chief strength lay in the army, whose veterans looked upon their great captain almost as on a demigod, whose soldiers had known no spoil, and whose marshals no glory, since the empire had departed, whose thoughts were always dwelling on the campaigns of Jena and Marengo, who were constantly thirsting to renew the triumphs of Austerlitz, and to wipe out the discomfiture of Waterloo. But, besides the army, this party could count a great number of adherents among the middle classes, who remembered how Napoleon had restored order and stability at home, while he extended the boundaries and the influence of France abroad ; how he had opened by force new Continental markets for their produce ; how he had stimulated industry, protected commerce, and covered the land with roads, bridges, and public institutions. Among the commercial people, too, there were many who regretted the times when commissaries and contractors grew wealthy in a single year, and when a hardy speculation or a glorious campaign supplied wherewithal to found and endow a family. The peasantry of France, too, were Buonapartists almost to a man, as far as they had any political predilections at all. It was Napoleon who had re-organized society after the horrors of the Revolution. If it was Napoleon who had taken their sons and brothers as conscripts, it was he also who had led them on to renown, and often to wealth and distinction. He wrote his name indelibly on the very soil in every department of France ; his is literally the only name known in the agricultural provinces and among the ignorant and stationary cultivators of the land. The demagogues who agitated France and the ruffians who ruined her before his time, as well as the monarchs who have ruled her since, have passed away and left no trace,—but Napoleon is remembered and regretted everywhere ; his is

the only fame which has survived the repeated catastrophes of sixty years, and floats uningulfed on the waters of the deluge. Many of the peasantry have never realized his death. Many even believe, incredible as it may seem, that it is he himself who now rules France. The overwhelming majority which elected Louis Napoleon to the Presidency surprised no one who has had an opportunity of conversing with the peasantry in the less visited districts of the country.

The third party was the Orleanists, or adherents of the existing dynasty. They were numerous and powerful, and comprised many sections. They included a great majority of the middle ranks, nearly the whole of the commercial classes, and five-sixths of the practical, sober, and experienced politicians of the land. Besides those who were attached to the government by long connexion, by old habit, by services rendered or benefits received, the Orleans dynasty rallied round it all the friends of constitutional liberty, all admirers of the English system, all who hoped by means of the Charter—imperfect and mutilated as it was—and of the two Chambers—restricted as was the suffrage, and corrupt as was often the influence brought to bear upon the elections—gradually to train France to a purer freedom, and a higher degree of self-government; to tide over the period of national boyhood and inexperience, and navigate the vessel of the state through the rocks and shoals which menaced it, into smoother waters and more tranquil times;—all the moneyed men, too, to whom confusion, uncertainty, and change are fraught with impoverishment and ruin; all that class, so numerous, especially in Paris, who lived by supplying the wants of travellers and foreign residents; all whose idol was order, by whatever means it might be enforced, and at whatever price it might be purchased, and who saw no chance of peace or stability save under Louis Philippe's rule; and, finally, all belonging to that vast and indescribable section of every nation, who owned no allegiance, who worshipped no ideal, who sacrificed to no principle, whom Dante has scorched with his withering contempt, as neither good nor bad, but simply, and before everything, selfish. The strength of this party lay in its wealth, in its political experience, in its cultivation of the material interests of the country, in the sympathy of England, and in all those nameless advantages which long possession of the reins of power under a government of centralization never fails to confer.

Lastly, came the Republicans, divided, like the Orleanists, into many sections. There were the Republicans on principle—stern, honest, able and uncompromising, of whom Cavaignac may be taken as the living, and Armand Carrel as the departed type. They had clear, though often wild conceptions of liberty—

an intelligible though an impracticable political theory ; they worshipped a noble though generally a classical ideal, for which they were as ready to die and to kill, as any martyr who was ever bound to the stake. They belonged to the same order of men as the Cromwells and the Harrisons of England, and the Balfours of Scotland, with the difference, that their fanaticism was not religious but political. Still they were, for the most part, estimable for their character, respectable in talents, and eminently formidable from the concentrated and resolute determination of their zeal.—There were the Republicans by temperament—the young, the excitable, and the poetic, who longed for an opportunity of realizing the dreams of their fancy, whose associations of freedom and renown all attached themselves to the first phase of the old Revolution, and whose watchword was “the year 1793.” Such are to be found in nearly all countries. Their mental characteristic belongs rather to the time of life than to the nation or the age. Still they have played a prominent part in all French convulsions. The École Polytechnique has an historical fame.—Then there were the Socialist republicans, whose hostility was directed less against any dynasty or form of government, than against the arrangements of society itself ; who conceived that the entire system of things was based upon a wrong foundation, and who saw, in the overthrow of existing powers, the only chance of remodelling the world after their fashion. Of these Louis Blanc was the leader ; and among his followers were hundreds of thousands of the operative classes, soured and maddened with privations, thirsty for enjoyment, and intoxicated with the brilliant and beautiful perspective so eloquently sketched out before them—but, for the most part sincere, well-meaning, ignorant, and gullible, and easily dazzled and misled to wrong by the lofty and sonorous watchwords which their mischievous guides knew so well how to pronounce.—Lastly, there were the wretches who in troubled times come at the heels of every party, to soil its banner, to disgrace its fortunes, to stain its name—who profit by its victory, and slink away from it in defeat. The idle, who disdained to labour ; the criminal who lived by plunder ; the savage whose element was uproar ; men who hated every government, because they had made themselves amenable to the laws of all ; thieves and murderers, whom the galley and the prison had disgorged—all these obscene and hideous constituents stalked forth from their dens to swell the ranks of the Republicans, and to pillage and slay in the name of the Republic.

Such were the political parties, in the midst of whose noisy and furious hostility France was called upon to constitute a strong and stable government, on the morrow of that amazing catastrophe, which, on the 24th of February 1848, had upset

a constitution, chased away a dynasty, and left society itself in a state of abeyance, if not of dissolution. The Provisional authorities—partly self-elected, partly voted in by acclamation, partly foisted in by low and impudent intrigue—had proclaimed a Republic, without waiting to give the nation time to express its volition in the matter, and without any intention of deferring to this volition even when expressed. To establish and consolidate a Republican form of government was thus the task assigned to the country;—a task which the existence of the several parties we have enumerated would alone have sufficed to make perplexing and difficult enough. But impediments far more serious were behind. All things considered, the problem was probably the hardest ever set before a nation:—to reconstruct society on a stable foundation, with all the usual elements of society absent or broken up,—without a monarch, without an aristocracy, without a religion,—with no principle unquestioned, with no truth universally admitted and revered, with no time-honoured institution left standing amid the ruins. She had to do all this, and more, in spite of nearly every obstacle which the Past and the Present could gather round her, and in the absence of nearly every needed instrument for the work. With antecedents in her history—with monuments on her soil—with arrangements in her social structure—with elements in her national character—which seemed peremptorily to forbid and exclude republicanism, she endeavoured to construct a republic, and seemed resolved to be satisfied with nothing else. With no honest, high-minded, or venerated statesmen standing out like beacon-lights among the multitude, whom all were emulous to love, honour, and obey, she was called upon to undertake a work which only the loftiest intellects operating upon the most trusting and submissive people could satisfactorily accomplish. She set herself to rival and surpass in their most difficult achievements nations that differed from her in nearly every element of their national life. With a pervading military spirit—with a standing force of nearly half a million, and an armed and trained population amounting to two millions more—with a centralized despotic bureaucracy—with Versailles and the Tuileries ever recalling the regal magnificence of former days—with an excitable temper, an uncommercial spirit, and a subdivided soil—she is endeavouring to imitate and exceed that political liberty, and hoping successfully to manage those democratic institutions, which have been the slow and laborious acquisitions of Britain, with her municipal habits and her liberal nobility; of America, with her long-trained faculty of self-government, her boundless and teeming territory, and her universally diffused material wellbeing; of Switzerland, with her

mountainous regions and her historic education ; and of Norway, with her simple, hardy, and religious population, and her barren and untempting soil.

Let us look a little more closely into a few of those peculiarities in the national character and circumstances, which appear to render the present struggles of the French after a constitution at once stable and democratic, so difficult if not so hopeless.

And, first, as to RACE. Races of men, like individuals, have their distinct type, their peculiar genius, which is the product of their origin, their physiological organization, their climate, and the development of civilisation through which they have passed,—which is, in fact, their inheritance from ancient times. Few European nations are of pure blood ; almost all contain several elements, and are the more sound and vigorous for the admixture. The French and the English have in common something of the Norman and something of the Teutonic blood ; but in England the prevailing element is the Saxon sub-variety of the Teutonic ; in France the prevailing element is the Gallic sub-variety of the Celtic. From our Norman conquerors we derive that intellectual activity, that high resolve, those habits of conquest and command, so characteristic of our upper ranks, and which have spread by intermarriage through all classes. From our German forefathers we inherit our phlegm, our steadiness, our domestic habitudes, and our unhappy addiction to spirituous liquors. The predominance of Frank and Norman blood gave to the old aristocracy of France those generous and noble qualities which so long distinguished the class ; but since it was submerged in the great deluge which desolated the closing years of the last century, the Celtic element which pervades the great mass of the people has shone forth paramount and nearly unmodified. Now, the Teuton and the Celt have characteristics and capacities wholly dissimilar. According to the masterly analysis of our first ethnographical authority, M. Gustaf Kohnst, the distinctive marks of the former are slowness but accuracy of perception, a just, deep, and penetrating, but not quick or brilliant intellect. The distinctive peculiarities of the Celt, on the contrary, are quickness of perception, readiness of combination, wit, and fertility of resource. The passion of the Celt is for national power and grandeur ; that of the Teuton for personal freedom and self-rule. The Teuton is hospitable, but unsocial and reserved ; the Celt is immoderately fond of society, of amusement, and of glory. The one is provident and cautious ; the other impetuous and rash. The one values his own life, and respects that of others ; the other sets little value upon either. Respect for women is the characteristic of the Teuton ; passion

for women the characteristic of the Celt.* The latter is intemperate in love; the former is intemperate in wine. The fancy of the one is sensuous; that of the other ideal. Lastly, the religious element presents diverse manifestations in the two races;—in the Celt there is a latent tendency towards polytheism, while the Teuton displays a decided preference for monotheistic views;—Romanism retains an almost unshaken hold over the former; Protestantism has achieved its victories exclusively among the latter.

Now, these distinctions are not fancies of our own, derived from a glance at France, Germany, and England, under their present phases; they are taken on the authority of a philosopher, whose conclusions are the result of long study, and of the widest range of observation. The general accuracy of the delineation will be generally acknowledged, and can scarcely fail to impress us with the improbability that institutions which are indigenous among one of these great divisions of humanity should flourish and survive when they are transplanted into the other. Self-government, and the forms and appliances of political freedom, are plants of native growth in England and America; they are only delicate and valuable exotics in France. These national discrepancies manifest themselves in public life in a thousand daily forms. The Englishman is practical, business-like, and averse to change; his imagination, though powerful, is not easily excited; his views and aims are positive, unideal, and distinct. The Frenchman is ambitious, restless, and excitable—aspiring after the perfect; *passionné pour l'inconnu*; prone to “*la recherche de l'absolu*,” constantly, as Lamartine says, wrecking his chance or his possession of the good “*par l'impatience du mieux*.” The Englishman, in his political movements, knows exactly what he wants; his object is definite, and is generally even the recovery of something that has been lost, the abolition of some excrescence or abuse, the recurrence to some venerated precedent. The Frenchman is commonly aroused by the vague desire of something new, something vast, something magnificent; he prefers to fly to evils that he knows not of, rather than to bear those with which he is familiar. His golden age beckons to him out of the untried and unrealized future; ours is placed almost as baselessly, but far less dangerously, in the historic past. The Frenchman is given to scientific definitions and theories in politics; the Englishman turns on all such things a lazy and contemptuous glance. The former draws up formal declarations of the rights of man, but has an imperfect understanding of

* Dr. Kombst remarks, as a constant fact, the existence of Foundling Hospitals among Celtic nations, and their absence among those of Teutonic origin.

his own, and is apt to overlook those of others; the latter never descants on his rights, but exercises them daily as a matter of course, and defends them stoutly when attacked. The one is confident in his own opinion, though he be almost alone in his adhesion to it; the other has always a secret misgiving that he is wrong when he does not agree with the majority. All these are so many criteria of the possession of that "political instinct," that native aptitude for administrative business, the defect of which in the French people has hitherto rendered all their attempts at a working constitution so abortive.

Next, as to RELIGION,—the absence of which as a pervading element is a deplorable feature of the national character of France. The decay of her religious spirit dates from the Revocation of the Edict of Nantes. That fatal measure, while it banished Protestantism, struck Romanism with impotence and a paralytic languor. "The Gallican Church,* no doubt, looked upon this Revocation as a signal triumph. But what was the consequence? Where shall we look after this period for her Fénélons and her Pascals? where for those bright monuments of piety and learning which were the glory of her better days? As for piety, she perceived that she had no occasion for it, when there was no longer any lustre of Christian holiness surrounding her; nor for learning, when there were no longer any opponents to confute or any controversies to maintain. She felt herself at liberty to become as ignorant, as secular, as irreligious as she pleased; and amidst the silence and darkness she had created around her she drew the curtains and retired to rest." To the forced and gloomy bigotry which marked the declining years of Louis Quatorze succeeded the terrible reaction of the Regency and the following reigns. Amid the orgies of weary and satiated profligacy arose first a spirit of scoffing, then of savage, vindictive, and aggressive scepticism. The whole intellect of that acute and brilliant people ranged itself on the side of irreligion; and nothing was left to oppose to the wits, the philosophers, and the encyclopedists, save cold prosings which it was a weariness to listen to, frauds and fictions which it would have been imbecility to credit, pretensions which the growing enlightenment of the age laughed to scorn, and the few rags of traditional reverence which the indolent, luxurious, and profligate lives of the clergy were fast tearing away. The unbelief of the higher ranks spread rapidly to those below them: some were unbelievers from conviction, some from fashion, some from a low and deplorable ambition to ape their superiors. "Bien que je ne suis qu'un pauvre coiffeur (said a hair-dresser to his employer one day in

* Robert Hall.—Review of "*Zeal without Innovation.*"

1788) je n'ai plus de croyance qu'un autre." But worse than this, all that was warm or generous in human sympathies, all that was hopeful or promising for human progress, all that was true and genuine in native feeling, was found on the side of the philosophers. Religion ranged itself on the side of ignorance and despotism. Scepticism fought the battle of justice, of science, of political and civil freedom. The philosophers had truth and right on their side in nearly everything but their assaults on Christianity; and the Christianity then presented to the nation was scarcely recognisable as such. The result of these unnatural and unhappy combinations has been that religion has been indissolubly associated in the mind of the French with puerile conceits, with intellectual nonsense, with political oppression; while infidelity wears in their eyes the cap of liberty, the robes of wisdom, the civic crown of patriotic service.

Even the shocking license into which Atheism wandered under the Republic produced nothing more genuine or deep than the reaction towards decency under Napoleon. The nation remained at heart either wholly indifferent or actively irreligious; and such, in spite of growing exceptions, it continues to this day, by the confession of those even among its own people who know it best. The two reigns of the Restoration, and that of Louis Philippe, rather aggravated than mitigated the evil. The effect of this national deficiency in the religious element, is to augment to a gigantic height the difficulty of building up either society or government in France. Its noxious operation can scarcely be overrated. The foundation-rock is gone; the very basis is a shifting quicksand. The habitual reverence for a Supreme Being, whose will is law, and whose laws are above assault, question, or resistance; the sense of control and the duty of obedience which flow from this first great conviction,—lie at the bottom of all community and all rule; without these it is difficult to see how the constructive task can even be commenced.

The absence of a fundamental and pervading religious faith has shewn itself in France in two special consequences, either of which would suffice to make the work set before them not merely Herculean, but nearly hopeless. The first is this:—France prides herself upon being a land in which pure reason is the only authority extant. She has no *prejudices* to lie at the root of her philosophy, no doctrine settled and universally adopted, and laid by as an everlasting possession,—a *κτῆμα ἐς αἰ* in the sacred archives of the nation. She has no *axioms* which it would be insanity or sacrilege to question. Everything is matter for speculation, for doubt, for discussion. The very opinions which, with all other people, have long since passed into the category of first principles, are with her still themes for the wit of the saloon and the

paradoxical declamation of the schoolboy. The simplest and clearest rules of duty, the most established maxims of political and moral action, the assumptions, or the proved premises which lie at the root of all social arrangements, dogmatic facts the most ancient and widely recognised, have in France every morning to be considered and discussed anew. Every belief and opinion, without exception, is daily remanded into the arena of question and of conflict. Topics the most frivolous and the most sacred, truths the most obvious and the most recondite, doctrines the clearest and the most mystical, are perpetually summoned afresh before the judgment-seat of logic, till none can by any possibility obtain a firm and undisputed hold upon the mind. The fact is not wonderful, though its consequences are enormously pernicious. It is the inherited misfortune of a generation which has grown up in the vortex of a political and moral whirlpool, where nothing was stable, nothing permanent; where it was impossible to point to a system, an institution, or a creed, *quod semper, quod ubique, quod ab omnibus*; where one philosophy after another chased its predecessor from the stage; where one form of government was scarcely seated on the throne before its successor drove it into exile; where, in a word, there was not a school, a doctrine, or a dynasty, of which men of mature age (to use the fine and pathetic language of Grattan) had not "rocked the cradle and followed the hearse,"—not an institution extant and surviving of which nearly every one alive could not remember the time when *it was not*. The result of all this has been that an entirely different class of subjects from those ordinarily agitated in settled countries has come up. Instead of discussing whether a monarch should govern or only reign, they are discussing whether the lowest and most ignorant orders of the mob should not have the actual sovereignty in their hands. Instead of considering modifications in the laws of landed inheritance, they are disputing whether the very institution of property be not in itself a robbery. Instead of differing on details of the law of marriage and divorce, they are bringing into question the subject of family ties, and the relation between the sexes in its entirety. Their struggles are not on behalf of religious liberty, nor for this Church, nor for that sect, but for or against those fundamental ideas which are common to all creeds alike. It is not such or such a political innovation, such or such a social or hierarchical reform which form the subject of habitual controversy; it is the religious, political, and moral groundwork of society that is at stake and in dispute.

We are here at once led to the recognition of that great fact which explains, better than any divergence of historic antecedents, or any dissimilarity of national character, the startling

contrast between the failure of the French Revolution, and the success of that great English movement of the seventeenth century which corresponds to it. M. Guizot, with his accustomed sagacity, has in his last work placed his finger upon this distinction, though he abstains from following out a contrast so painful and unfavourable to his countrymen. The French Revolution followed on a sceptical and philosophic movement of men's minds. The English Revolution followed on a period of deep religious excitement. The English revolutionists were even more attached to their religious faith than to their political opinions. They fought for liberty of conscience even more fiercely than for civil rights. "Ce fut la fortune de l'Angleterre au xvii^e siècle, que l'esprit de foi religieuse et l'esprit de liberté politique y régnaient ensemble. Toutes les grandes passions de la nature humaine se déployèrent ainsi *sans qu'elle brisât tous ses freins*." The English political reformers were pious Christians, whose faith was an earnest, stimulating, exalting, strengthening reality;—the French political reformers, on the other hand, were atheists, brought up in the school of the Encyclopedists to despise and deride all that other men held sacred, whose passions, interests, and prejudices, therefore, found no internal impediment to their overflow. The Puritans unquestionably were bold reformers of religious matters as well as of political ones; they indeed attacked and overthrew the established creed, while maintaining intact the common principles of the Christian faith; but in the midst of their successes—in the chaos of ruins both of temples and palaces which, like Samson, they heaped round them—there was something left always standing which all sects revered and spared. They still, as M. Guizot beautifully says, recognised and bowed down before *a law which they had not made*. It was this law which they had not made—this boundary wall not built with hands—which was wanting to the French reformers: to them everything was human; on no side did they meet an obstacle, acknowledged as divine, which commanded them to stop in their career of conquest and destruction. The consequence was, that in the one case the *bouleversement* reached only the secondary and derivative,—in the other, it embraced the primitive, fundamental, and indispensable institutions of social life.

The second special operation of French irreligion on society may be thus explained:—The thirst after happiness is natural to the human heart, and inseparable from its healthy action. After this happiness we all strive, though with every imaginable difference as to the intensity of our desire, and the conception of our aim,—as to the scene in which we locate it, and the means we employ to arrive at it. The cultivated, the virtuous, and the wise, place their happiness in the gratification of the affections,

and the development of the intellectual and moral powers. Material welfare they value indeed, but they pursue it with a moderate and restrained desire. To the ignorant and the sensual, happiness consists in physical enjoyment and the possession of the good things of life. The paradise of the religious man is laid in a future and spiritual world; that of the unbeliever—practical or theoretic—in some earthly Eden. On the belief or disbelief in the immortality of the soul, will practically depend both the nature and the locality of the heaven we desire. Now the French—that is, that active and energetic portion of them which gives the tone to the whole people—repudiate the doctrine of a future life, and yet are vehement aspirants after enjoyment. They are well described by one of themselves as “*passionnés pour le bonheur matériel*.” The effect of the disbelief in a future world is, of course, not only to turn all their desires and efforts after happiness upon this, but to make their conception of the happiness of this life essentially and exclusively earthly, and to cause them to pursue it with the impatience, the hurry, the snatching avidity of men who feel that *now or never is their time*, that every moment that elapses before their object is grasped is a portion of bliss lost to them for ever. Those who, however dissatisfied with their portion of this world’s goods, still, like the majority—a decreasing majority we fear—of our English working-classes, retain some belief in a future life, can strive after the improvement of their earthly lot with a more deliberate and less angry haste; for if they fail, their happiness is not denied, but only postponed to a more distant and a better day.

“To them there never came the thought
That this their life was meant to be
A pleasure-house, where peace unbought
Should minister to pride or glee.

“Sublimely they endure each ill
As a plain fact, whose right or wrong
They question not, confiding still
That it shall last not overlong:

“Willing, from first to last, to take
The mysteries of our life as given;
Leaving the time-worn soul to slake
Its thirst in an undoubted heaven.”

But if this earth is indeed all, then no time is to be lost, no excuse or delay is to be listened to. It is natural, it is logical, it is inevitable for those who hold this dreary creed to scout as insults those cautions as to the danger of going too fast, those maxims of wisdom which would assure us that social wellbeing is a plant of slow growth, that we must be satisfied with small and rare in-

stalments of amelioration, that we must be content to sow the seed in this generation, and leave our children, or our children's children, to reap the fruit. These indisputable truths sound like cruel mockery to the man who, suffering under actual and severe privations, regards a future existence as the dream of the poet, or the invention of the priest.

The immeasurable and impatient appetite for material felicity which is now one of the distinctive traits of French society, and which is the legitimate offspring of her irreligion, is beyond question the deepest and most dangerous malady which the state physician has to deal with; for the Frenchman is not only logical, but always ready and anxious to translate his logic into practice. If our lot is to be worked out, and our nature to receive its full development on earth, we must set to work at once, at all hazards, and in spite of all obstacles, to construct that present paradise which is to be our only one. One of the historians of the recent Revolution, Daniel Sterne, has the following just remark:—"S'il est vrai de dire que le socialisme semble au premier abord une extension du principe de fraternité, apporté au monde par Jésus-Christ, il est en même temps et surtout une réaction contre le dogme essentiel du Christianisme, la Chute et l'Expiation. On pourrait, je crois, avec plus de justesse, considérer le socialisme comme une tentative pour *matérialiser* et *immédialiser*, si l'on peut parler ainsi, la vie future et le paradis spirituel des Chrétiens." Hence those Socialist and Communistic schemes, those plans for the re-organization of society on a new and improved footing, which have taken such a strong hold on the imagination and affection of the French *prolétaires*. Hence the eagerness and ready credulity with which they listen to any orators or theorists who promise them, by some royal road, some magic change, the wellbeing which they believe to be both attainable and their due. Hence, too, that daring, unscrupulous, unrelenting impetuosity, with which these social iconoclasts emulate the fanaticism of religious sectaries, and drive their car of triumph over ranks and institutions, over principalities and powers, over all the rich legacies and pathetic associations of the past, as remorselessly as did the daughter of Servius over the scarce lifeless body of her father.

This passion for material wellbeing—this "haste to be happy"—is by no means confined to the socialist schemers or the operative classes. It pervades ranks far above them, more especially those members of the *bourgeoisie* who have entered the liberal professions without any means or qualifications except natural aptitude and intellectual culture; the advocates, surgeons, artists, journalists, and men of letters. These are described by one who knows them well as the section of French society whose material condi-

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Regency and the Directory could not be surpassed, and indeed was not approached. But the high and scrupulous, though sometimes fantastic and inconsistent sense of honour, which formerly distinguished the French gentleman, seemed to be gone; his regard for truth and even pecuniary integrity was deplorably weakened; the "mire of dirty ways," whether in political life or in speculative business, no longer instinctively revolted his finer susceptibilities;—that "sensibility of principle, that chastity of honour, which felt stain like a wound, which inspired valour, while it mitigated ferocity," had died away under the demoralizing influence of the repeated social convulsions of the last sixty years. When religion has become an empty garment, and piety a faded sentiment, and loyalty extinct from want of nourishment, and when strict moral rules have thus lost their fixity and their sanctions, the spirit of a gentleman may for a time, in some measure, supply their place; but if this also has died out, the last barrier to the overflow of the twin vices of licentiousness and barbarity is swept away.

The extent to which this spirit was extinguished was not known to the world till the filthy intrigues connected with the Spanish marriages, (since so remorselessly laid bare by the publication of Louis Philippe's private letters,) and the suicide of the diplomatic tool concerned in them, the Count de Bresson, out of pure disgust at the dirt he had been dragged through,—first exposed a degree of low turpitude, for which even France was scarcely prepared. Then followed in quick succession the trial and conviction of a cabinet minister and a general officer for dishonesty and peculation in their official capacities, and the awful tragedy of the Duke de Choiseul-Praslin, a member of the highest nobility in France—the murder of his wife as an obstacle to his illegitimate desires, and his own subsequent suicide in prison. When, finally, a statesman and philosopher, as high in rank and reputation as Guizot, expressed little surprise and no horror at the corrupt malversation of his former colleague M. Teste, and even consented to soil his lips in public with a quasi-lie, in order to defend the duplicity of his master,—a sort of shudder ran through the better circles of Europe,—a perception that the measure of iniquity was full, and that the time of retribution must be at hand. It was as if the book had been closed, and the awful fiat had gone forth: "Ephraim is joined unto idols: *let him alone.*" "He that is unjust, let him be unjust still; he that is filthy, let him be filthy still: behold, I come quickly, to give to every man according as his work shall be!"

The prevalent immorality showed itself to the French themselves in many minute symptoms which were unobservable by other nations,—in the looseness of domestic ties, in the grasping

and gambling spirit of Parisian society, in the appearance of the *lionnes*, as they were called, and other extravagant indecorums of fashionable life; but to the world at large, it was chiefly signalized in the strange taste and monstrous conceptions which degraded their popular and lighter literature, and in the general corruption which pervaded all departments of the administration. We very much question whether any period of history can furnish a parallel to the French fictitious and dramatic literature of the last twenty years. Former times may have furnished comedies more coarse, tragedies more brutal, novels more profligate; but none displaying a taste so utterly vicious, a style of sentiment so radically false and hollow, a tone and spirit so thoroughly *diseased*. Not only do voluptuous pictures everywhere abound; not only is the unrestrained indulgence of the natural passions preached up as venial, to say the least; not only is the conjugal tie habitually ridiculed or ignored; not only is genius ever busy to throw a halo of loveliness over the most questionable feelings, and the most unquestionable frailties;—but crimes of the darkest dye are chosen by preference, and with research, as the materials of their plot; criminals, black with every enormity which we hold most loathsome, are the picked and chosen favourites of the play-wright and the novelist; scenes, which the pure and the refined mind shrinks even to dream of, are the commonest localities of their unholy delineations;—and the imagination of the writer is racked to devise the most unnatural occurrences, the most impossible combinations, the most startling horrors. This language sounds like exaggeration; but it will not be deemed such by any one who has even dipped into the cloaca of modern French fiction, from its more moderate phase in Victor Hugo, to its culminating point in “*Le Comte de Monte-Christo*,” and the “*Mystères de Paris*.” The favourite plan—the supreme effort—of these writers is to conceive some marvellous event or combination which has no prototype in nature, and could never have presented itself to a sound or healthy fancy; to depict some monstrous criminal, and surround him with the aureole of a saint,—to describe some pure, beautiful, and perfect maiden, and place her, as her atmosphere and cradle, in the lowest and filthiest haunts, where barbarity nestles with licentiousness. Excitement—what the French call *une sensation*—is the one thing sought after; the object to which taste, decency, and artistic probabilities, are all sacrificed: or if any more serious idea and sentiment runs through this class of works, it is that of hostility to the existing arrangements of society,—its inequalities, its restraining laws, its few still unshattered sanctities. It is worthy of remark that Victor Hugo, the author of “*Marion de L’Orme*,” “*Lucrèce Borgia*,” “*Bug-Jargal*,” and “*Hans*

d'Islande," is a leader of the extreme party in the Chambers; that Eugène Sue, the author of "Atar-Gull," "Le Juif errant," and "Les Mystères du Peuple," is the chosen representative of the more turbulent socialists; and that George Sand (whom we grieve to class with these even for a moment) was the reputed friend and right hand of the desperate democratic tyrant, Ledru-Rollin. Literature in France has become allied not only with democracy—that it may well be without any derogation from its nobility—but with the lowest and most envious passions of the mob, with the worst and most meretricious tastes of the *coulisses* and the saloon. Its votaries and its priests seem to have alike forgotten that they had an ideal to worship, a high ministry to exercise, a sacred mission to fulfil. Excellence, for which in former times men of letters strove with every faculty of their devoted souls,—for the achievement of which they deemed no effort too strenuous, no time too long—is deposed from its "place of pride;" and success,—temporary, momentary, sudden success,—success among a class of readers whose vote can confer no garland of real honour, no crown of enduring immortality,—success, however tarnished, and by what mean and base compliances soever it be won,—is their sole object and reward.

The unwholesome and disordering sentiment which alone could flow from such a school is nearly all that the lighter intellect of France has had to feed upon for more than half a generation; and the corruption of the national taste and morals consequent upon such diet, is only too easily discernible. A passion for unceasing excitement, a morbid craving for mental stimulants thus constantly goaded and supplied, has rendered everything simple, genuine, and solid in literature, everything settled and sober in social relations, everything moderate, stable, and rigid in political arrangements, alike stale and flat. The appetite of the nation is diseased; and to minister to this appetite, or to control and cure it, are the equally difficult and dangerous alternatives now offered to its rulers.

The second form in which the national demoralization especially showed itself—at once a fatal symptom and an aggravating cause—was in the general administrative corruption which prevailed. This did not originate under Louis Philippe, but was beyond question vastly increased during his reign; and was not only not discouraged but was actually stimulated by his personal example. The system of place-hunting—the universal mendicancy for public employment, which reached so shameless a height just before the last revolution, found in him one of its worst specimens. No jobbing or begging elector ever besieged the door of the minister for a tobacco-license, or a place in the customs or the passport office, with more impudent pertinacity, than

Louis Philippe showed in persecuting the Chambers for *dotations* for his sons. Those who were conversant with the French ministerial bureaux declare, that it is difficult to imagine, and that it was impossible to behold without humiliation and disgust, the passionate covetousness, the mingled audacity and meanness, displayed among the candidates for place. *Everybody* seemed turned into a hanger-on of Government, or a petitioner to become so: everybody was seeking a snug berth for himself or for his son, and vowing eternal vengeance against the Government if he were refused. The system of civil administration in France—the senseless multiplication of public functionaries—has to thank itself for much of this embarrassing and disreputable scramble. The number of places, more or less worth having, at the disposal of Government, appears, by a late return to the Chamber, to exceed 535,000. “Les Français (says a recent acute writer in the *Revue des deux Mondes*) se précipitent vers les fonctions, parceque c’est la seule carrière qui garantisse l’existence même médiocre, et qui permette la sécurité du lendemain. Dans l’espoir d’assurer à leurs enfans un émargement au budget, nous voyons chaque jour de petits capitalistes consacrer au frais de leur éducation une partie ou la totalité de leur mince héritage. Les fonctions publiques sont considérées comme une assurance sur la vie, ou un placement à fonds perdus. Une place exerce sur l’esprit des familles la même fascination que faisait autrefois une prébende ou un canonicat. Madame de Staël disait autrefois: ‘Les Français ne seront satisfaits que lorsqu’on aura promulgué une constitution ainsi conçue; article unique: Tous les Français sont fonctionnaires?’ Le socialisme ne fait que généraliser sous une autre forme la passion des Français pour les places, et réaliser, sous un autre nom, le mot de Madame de Staël. La Charte du droit au travail peut, en effet, s’énoncer en une seule phrase: Tous les citoyens sont salariés par l’état.”

The number of electors in Louis Philippe’s time was 180,000—the number of places in the gift of the Crown was 535,000; that is, there were three places available for the purpose of bribing each elector. Put this fact side by side with that passion for the position of a Government *employé* which we have just described, and it will be obvious that the corruption must have been, as it was, systematic and universal. The electors regarded their votes as a means of purchasing a place. Each deputy was expected to provide in this way for as many of his constituents as possible, and knew that his tenure of his seat depended upon his doing so. Of course he was not likely to forget himself: having purchased his seat, it was natural he should sell his vote. Thus the Government bribed the Chambers, and the Chambers bribed the electoral body. Now, from this elec-

mosynary giving away of places, to *selling* them—from selling them for *support* to selling them for *money*—the step is short and easy.

Some important considerations have been suggested in mitigation of the culpability of Louis Philippe's Government in thus corrupting both the candidates and the constituency,—to which, though not pretending to admit their entire justice, we may give whatever weight they may, on due reflection, seem to deserve. It is questionable (it has been said) whether representative institutions among a corrupt and turbulent people, or a people from any other causes unfit for self-government, do not *necessitate* bribery in some form. It was found so in Ireland: it was found so in those dark times of English history which elapsed from 1660-1760. The Government of July found representative institutions already established, and was obliged to rule through their instrumentality. The Ministers were in this position: a majority in the Chambers was essential to them, to the stability of their position, to the adequacy of their powers. This majority could not be secured, among an excitable and foolish people, by wise measures, by sound economy, by resolute behaviour; nor among a corrupt and venal people, by purity of administration, or steady preference of obscure and unprotected merit. They were the creation of a revolution, which their defeat might renew and perpetuate, and a renewal of which would be, to the last extent, disastrous to the country. They had, therefore, only two alternatives—either to distribute places with a view to the purchase of Parliamentary votes, to hand over appointments to deputies for the purchase in their turn of electoral suffrages; or to enlarge the franchise to such an extent as to render bribery impossible, and so throw themselves on the chance which the good sense and fitness for self-rule of the mass of the people might afford them. This they had not nerve enough or confidence enough to do; and who that knows the French people, and has seen their conduct on recent occasions, will venture to say that they were wrong?

If the French nation were fit for representative institutions, if it had the sagacity, the prudence, the virtues needed for self-government, the latter ought to have been the course of the Administration of July; if it had *not*, (and who now will venture to pronounce that it had ?) the Administration had no choice but to command a majority by the only means open to them, viz., corruption. Representative institutions among a people unqualified for them can therefore only be worked by corruption, *i.e.*, by distributing the appointments at the disposal of the State with a view to the purchase of Parliamentary or electoral support. What Government, even in England or America, still

less in France—what Government, in fact, in any country *not autocratically ruled*—could stand a month if all its appointments were distributed with regard to merit *alone*; if, for example, Lord Stanley refused office to Mr. Disraeli or Lord John Manners because they were less competent to its duties than obscurer men; if Lord Lonsdale or the Duke of Newcastle had all their recommendations treated with merited disregard; if the members for Manchester or London saw their protégés contemptuously and rigidly set aside in favour of abler but less protected men? If corruption essentially consists, as it undeniably does, *in distributing the appointments and favours of the State otherwise than with a sole regard to merit and capacity*—if any deviation from this exclusive rule be corruption in a greater or less degree, then it is clear that some degree of corruption is inherent and inevitable in all representative Governments, and that the extent to which it prevails will be in precise inverse proportion to the sagacity and self-denying virtue of the people, *i.e.*, to the degree in which they can endure to see meritorious strangers preferred to less deserving friends. Where, in modern times, shall we find that blended humility and patriotism, which made the rejected candidate for the Lacedemonian Senate go home rejoicing, (perhaps with a touch of quiet sarcasm in his tone,) “that there were five hundred better men in Sparta than himself?” The people, therefore, and the institutions, not the rulers, are to blame for the amount of corruption which prevails. If they have the reins in their own hands, and yet cannot guide themselves, they must be governed by circuitous stratagems instead of direct force—for governed *ab extra* they must be. *It is the exclusive prerogative of an autocratic government to distribute appointments according to merit only.* Corruption—*i.e.*, appointments not exclusively according to desert, but with ulterior views, to purchase or reward parliamentary support—is the price which must be paid for free institutions among an imperfect people.

There is much truth in this plea; a plea which will be recognised as valid by each individual, in proportion as he is conversant with administrative life; but it does not affect our argument. For, whether the Government of France were excusable or not, the operation of the wholesale, systematic, and unblushing venality and scramble for place which prevailed, was equally indicative of, and destructive to, the morals of the community.

One result of all this—one of the saddest features of French national life, one of the darkest auguries for the future—is the low estimation in which all public men are held; the absence of any great, salient, unstained statesman, whom all revered, whom all could trust, and whom all honest citizens were willing

to follow and obey; of any politician who, in times of trial, could influence and sway the people by the force of character alone. They are not only worse off than other nations, at similar crises of their history, they are worse off than themselves ever were before. They have not only no Pericles, no Hampden, no Washington; they have not even a Turgot, a Lafayette, or a Mirabeau. Three only of their public men have been long enough and prominently enough before the world to have made themselves a European reputation—Guizot, Thiers, and Lamartine. All of these men have been at the head of affairs in turn; all are writers and historians of high fame; all are men of unquestioned genius; and two of them at least are types of a class. Thiers is a Provençal by birth, with all the restless excitability, all the *pétillante* vivacity, all the quenchless fire, all the shrewd, intriguing sagacity of the south. He launched into the mixed career of literature and politics at a very early age, and a characteristic anecdote is related of his first successes. The Academy of Aix, his native town, proposed the *Eloge de Vauvenargues* as the subject of their yearly prize. Thiers sent in an essay (anonymous, as was the rule) which was of paramount merit; but it was suspected to be his, and as he and his patron had many enemies, the academic judges proposed to postpone the adjudication of the prize till the following year, on the ground of insufficient merit in all the rival essays. Some days were yet wanting to the period of final decision. Thiers instantly set to work, and produced with great rapidity another essay on the same text, which he sent in with the post-mark of a distant town. The first prize was instantly adjudged to this, and the second only to the original production; and when both turned out to be the work of the same envied author, the academicians looked foolish enough. Shortly after this youthful stratagem Thiers came to Paris, the great rendezvous for all French talent, and commenced life as a journalist—that line which in France so often leads to eminence and power. His clear, vivacious, and energetic style, and the singular vigour and frequent depth of his views, soon made him favourably known. His *Histoire de la Révolution* established his fame; and when, on the appointment of the Polignac Ministry in 1829, he (in conjunction with Mignet and Carrel) established the *National* newspaper, with the express object of upsetting them, and pleading the cause of legal and constitutional monarchy against them, he was one of the acknowledged leaders of public opinion in France. The settled aim and plan of the three friends is thus epigrammatically stated by M. de St. Beuve:—“*Enfermer les Bourbons dans la Charte, dans la Constitution, fermer exactement les portes; ils sauteront inmanquablement par la fenêtre.*” In seven months

the work was done—the *coup d'état* was struck ; and Thiers was the prominent actor both in that public protestation against the legality of the Ordinances, which commenced the Revolution of July, and in those intrigues which completed it by placing the Duke of Orleans on the throne. Since that date he has been the most noted politician of France—sometimes in office—sometimes in opposition—sometimes, as in February 1848, bending to the popular storm, and disappearing under the waves—again, as in May, reappearing on the surface, as active and prominent as ever, as soon as the deluge was beginning to subside. Next to M. Guizot, he is unquestionably the statesman of the greatest genius and the most practical ability in France ; subtle, indefatigable ; a brilliant orator, an inveterate intriguer ; skilled in all the arts by which men obtain power ; restrained by no delicate scruples from using it as his egotism may suggest ; alike unprincipled as a minister, and untruthful as an historian ; boundless in the aspirations, and far from nice in the instruments, of his ambition ; inspiring admiration in every one, but confidence in no one. Still he is one of the few leading men in France who have a clear perception of what that country needs, and can bear ; and if his character had been as high as his talents are vast, he might now have been almost omnipotent.

Guizot is a statesman of a different sort, gifted, perhaps, with a less vivid genius, but with a character of more solid excellence and an intellect of a much loftier order. He earned his rank by many years of labour in the paths of history and philosophy before he entered the miry and thorny ways of politics, and both as a diplomatist and a minister has shewn himself equal to every crisis. Clear, systematic, and undoubting in his opinions, and pertinacious in the promotion of them ; stern, cold, and unbending in his manners, with something of the Puritan and much of the Stoic in the formation of his mind, fitted by nature rather for the professor's chair than the turbulent arena of the senate, but "equal to either fortune ;" earnestly devoted to the pursuit of truth in philosophic matters, but not always scrupulously adhering to it in the labyrinth of political intrigue ; taught by history and knowledge of contemporaneous life to look upon his countrymen with a degree of mistrust and contempt, which his ministerial career too often shewed ; watching their follies with more of lofty disdain than of melancholy pity, oftener with a sardonic smile than with a Christian sigh, and meeting the most hostile and stormy opposition with a cold and haughty imperturbability ; he was, perhaps, the most suitable, but was certainly the most unpopular ruler that France could have had. The stern front which he constantly opposed to any extension of the popular power or privileges, his resolute hostility to the liberalism of the

day, was much blamed at the time, and has since been regarded by some as the proximate cause of the Revolution of February, though scarcely, we think, with justice. We are too well aware of the prodigious and unseen obstacles which public men have to encounter, and of the incalculable difficulty of arriving at a just estimate of their conduct in any peculiar circumstances, which is inevitable to all who are not behind the scenes, to be much disposed to condemn the conduct of M. Guizot, on this head, from 1840 to 1848. It was evidently pursued *on system*, and subsequent events dispose us to think that it may very possibly have been judicious. He seems to have been convinced that the French were not ripe for larger liberties or a wider franchise, and to have resolved to let the education of many years of constitutional monarchy pass over their head before granting them more; and when we remember that the Parliamentary reforms of M. Thiers were as promptly and scornfully thrust aside by the leaders of the February Revolution, as the conservative policy of his predecessor, we greatly incline to think M. Guizot may have been right. At all events, he acted on a plan, and from conviction; and if his master had trusted him with sufficient confidence, and had displayed half his nerve, the convulsion which agitated and upset all Europe might, we believe, have been easily compressed within the limits of a Parisian *émeute*. It is worthy of remark that the three Governments which succeeded, the Provisional Government, the Dictatorship of Cavaignac, and National Assembly, have all found, or thought, themselves obliged to be far more sternly repressive than ever M. Guizot was. His two works, published since his fall, on "Democracy in France," and on "The Causes of the Success of the English Revolution," display a profound knowledge of the foibles, the wants, and the perils of his countrymen, such as no other French statesman has shewn. If he were again at the head of affairs, the experience of the last two years would, we believe, be found to have rendered the French far more competent to appreciate his merits, and more disposed to submit to his rule. A *popular* statesman he can never be.

Lamartine was made to be the idol of the French because he was the embodiment of all their more brilliant and superficial qualities. But he was utterly devoid of statesmanlike capacity. His mind and character were essentially and exclusively poetic; for power and effect as an orator he was unrivalled; and his "Histoire des Girondins" is one of the most splendid and ornate narratives extant in the world. He had much of the hero about him; he was a man of fine sentiments, of noble impulses, of generous emotions, of a courage worthy of Bayard, and greater perhaps than even Bayard would have shewn in civil struggles.

In the first three days of the Provisional Government, Lamartine was truly a great man : he was exactly the man demanded by the crisis ; he had all the qualities those sixty hours of “ fighting with human beasts ” required ;—and it was not till that long agony was passed, and the Government, once fairly seated, was called upon to act, that his profound incapacity and ignorance of political science became apparent. No man spoke more ably or more nobly : no man could have acted more madly, weakly, or irresolutely. He sank at once like a stone. From being the admiration of Europe—the central object on whom all eyes were turned, he fell with unexampled rapidity into disrepute, obscurity, and contempt ; and the entire absence of dignity, manliness, and sense betrayed in his subsequent writings has been astounding and appalling. The words in which he sums up the characteristics of the old Girondins are precisely descriptive of himself :—“ *Ils ne savaient faire que deux choses—bien parler, et bien mourir.* ”

The peculiar administrative institutions of France present another obstacle of the most formidable nature to the establishment of a stable republican government in that country. There are two distinct and opposite systems of administration, the municipal or self-governing, and the centralizing or bureaucratic ; and the degree of real freedom enjoyed by any nation will depend more on the circumstance which of these systems it has adopted, than on the form of its government or the name and rank of its ruler. The former system prevails in America, in England, and in Norway ; the latter is general upon the Continent, and has reached its extreme point in Germany and France. The two systems, as usually understood, are utterly irreconcilable : they proceed upon opposite assumptions ; they lead to opposite results. The municipal system proceeds on the belief that men can manage their own individual concerns, and look after their own interests for themselves ; and that they can combine for the management of such affairs as require to be carried on in concert. Centralization proceeds on the belief that men cannot manage their own affairs, but that government must do all for them. The one system narrows the sphere of action of the central power to strictly national and general concerns ; the other makes this sphere embrace, embarrass, and assist at the daily life of every individual in the community. Out of the one system a republic naturally springs ; or, if the form of national government be not republican in name, it will have the same freedom and the same advantages as if it were :—out of the other no republic can arise ; on it no republic, if forcibly engrafted, can permanently take root ; its basis, its fundamental idea, is despotic.

In no country has the centralizing system been carried so far as in France. In no country does it seem so suitable to or so submissively endured by the inhabitants. In no country is the metropolis so omnipotent in fashion, in literature, and in politics. In none is provincialism so marked a term of contempt. In none has the minister at the centre such a stupendous army of functionaries at his beck, appointed by his choice, and removable at his pleasure. The number of civil officers under the control of the central government in France is 535,000 : in England it is 23,000. The functions of these individuals penetrate into every man's home and business ; they are cognizant of, and license or prohibit his goings out and comings in, his buildings and pullings down, his entering into, or leaving business, and his mode of transacting it. This system, which in England would be felt to be intolerably meddlesome and vexatious, is (it is in vain to disguise it) singularly popular in France ;—it is a grand and magnificent fabric to behold ; it dates in its completeness from the Consulate, when the nation first began to breathe freely after the revolutionary storms ; and amid all the changes and catastrophes which have since ensued, amid governments overthrown and dynasties chased away, no one has made any serious endeavour to alter or even to mitigate this oppressive and paralyzing centralization. It has evidently penetrated into and harmonizes with the national character. The idea of *ruling themselves* is one which has not yet reached the French understanding : the idea of *choosing those who are to rule them* is the only one they have hitherto been able to conceive.

Now, this system, and the habits of mind which it engenders, operate in two ways to add to the difficulties of establishing a firm and compact government. In the first place, it deprives the people of all political education ; it shuts them out from the means of obtaining political practice or experience ; it forbids that daily association of the citizens with the proceedings of the government, from which only skill and efficient knowledge is to be derived. In England and in America, every citizen is trained in vestries, in boards of guardians, in parochial or public meetings, in political unions, in charitable societies, in magistrates' conclaves, to practise all the arts of government and self-government on a small scale and in an humble sphere ; so that when called upon to act in a higher function and on a wider stage, he is seldom at a loss. This apprenticeship, these normal schools, are wholly wanting to the Frenchman. The establishment of them and practice in them is an essential preliminary to the formation of any republic that can last. The French have been busy in erecting the superstructure, but have never thought of laying the foundation. The following contrast drawn by a citizen

of the United States is, in many respects, just and instructive :—

“It has never been denied that political institutions are healthful and durable only according as they have naturally grown out of the manners and wants of the population among which they exist. Thus, the inhabitants of the United States, inheriting from their English ancestors the habit of taking care of themselves, and needing nothing but to be left to the government of their own magistrates, have gone on prospering and to prosper in the work of their own hands. Every state, county, city, and town in America, you need not be told, has always been accustomed to manage its own concerns without application to or interference from the supreme authority at the capital. And this self-controlling policy is so habitual and ingrained wherever the Anglo-Saxon race has spread, that it will for ever present an insuperable obstacle to the successful usurpation of undue authority by any individual. The people of the thirteen original transatlantic states, in the construction of a commonwealth, had only to build upon a real and solid foundation made to hand ; but in France the reverse of this was the case when in the last century a republic was proclaimed, and continues so now, without any material diminution of the rubbish, which must be swept away before a trustworthy basis can be found for the most dangerous experiment in a nation’s history. The executive power, securely ensconced in central Paris, like a sleepless fly-catcher in the middle of his well-spun web, feels and responds to every vibration throughout the artfully organized system, which extends from channel to sea, and from river to ocean. Its aim has been to keep the departments in leading-strings, and its success to prevent neighbours from leaning only on each other for neutral aid and comfort in every undertaking great or small, and to drive them to the Minister of the Interior as the sole dispenser of patronage. Provincialism has hence become naturally associated with social inferiority, sliding easily into vulgarity ; and as vulgarity is often carelessly taken for intellectual incapacity, the consequence is, that the many millions living at a distance from the factitious fountain of power are regarded and treated as children even in matters that most deeply concern their daily comfort. If, for example, a river is to be bridged, a morass drained, or a church erected, more time is lost in negotiating at head-quarters for permission to commence the undertaking than would suffice in England or America to accomplish the same object twice over. Disgusted, doubtless, with all this, and, as too frequently happens, expressly educated by aspiring parents for some official employment, most provincials of distinguished talents, instead of honourably addressing themselves for advancement, as is the custom in the United States, to their own immediate communities, hasten to the feast of good things, whether within the Elysée or elsewhere, at which they soon learn to take care of themselves, leaving their country, as the motto on their current coin has it, to the ‘protection of God.’

“No one ought to feel surprised, then, whenever a revolution hap-

pens here, and a republic, the universal panacea which haunts the French brain, is announced, that the people out of Paris, utterly destitute of political training, and without leaders, as they are, should stand agape and helpless as a shipload of passengers in a gale whose ruthless violence has left them without captain or crew. Nor should their helplessness and apparent imbecility be a reproach to their natural intelligence, for the system of centralization, so briefly alluded to above as a curse to the country, has in its long course benumbed their faculties and paralyzed their energies for every sort of action beyond the little circle of a material existence. Neither is this system likely to be soon abandoned, the present Minister of the Interior having very lately, to my certain knowledge, fiercely and firmly resisted every attempt on the part of the Council of State to modify its operation. In the absence, therefore, of the very groundwork whereon to create and sustain a republic, how can such a form of government endure, except while it is kept as at present from toppling over, by the unwilling support of various factions, which preserve it from falling only to prevent an antagonist still more detested from taking its place?"

The second effect of this administrative centralization is to direct all the active, aspiring, discontented spirit which is always fermenting in the community, upon the originating power in the state. The people are passive as regards the administrators, aggressive as regards the government. They are annoyed or insulted by a policeman or a *sous-préfet*, and they at once, *having no means of direct action upon him, the immediate and subordinate agent*, vent their indignation on the central power. They have no readier way of avenging themselves on an obnoxious prefect than by upsetting the dynasty which appointed him. When they feel themselves oppressed, unprosperous, or suffering, they go at once to that which the system has taught them to regard as the source of all—the regal palace or the ministerial hotel at Paris: they cashier their rulers, but never dream of changing the system of administration, and consequently never mend their position. The evil remains undiminished; the discontent continues; and all that has been learned is the fatal lesson with what astounding facility governments may be overthrown which have no root in the affections, the habits, the wants, or the character of the people. In England, if a policeman affronts us, we bring him before a magistrate; if an overseer or relieving officer disgusts us, we remember it at the next election of guardians; if a taxgatherer oversteps his powers, we complain to his chief and insist on his dismissal; if refused a hearing we make Parliament itself a party to our grievance; if a magistrate acts oppressively we either expose him, or bring an action against him, secure of impartial justice. But no act of

injustice or oppression ever weakens our loyalty to Queen or Parliament, for we know they are not responsible for the faults of their subordinates, since they have given us ample means of self-protection against them.

A third reason which renders this central bureaucracy incompatible with any settled and secure government, except a powerful despotism, deserves much consideration. We have already spoken of the great difficulties thrown in the way of the re-organization of France, by that passion for material wellbeing which is at present so salient a feature in the character of her citizens. These difficulties are enormously enhanced when this material wellbeing is demanded *at the hands of the government*. Yet this demand is one which every Frenchman thinks himself entitled to make; and for generations successive governments have countenanced the claim. By taking out of the hands of the individual the regulation of his own destiny, and teaching him to look up to the abstraction called "The State," for guidance, direction, and support, it has sedulously fostered a habit of expecting everything from this supposed omnipotence, and has effectually trodden out that spirit of humble but dignified self-reliance which is the chief source from which material wellbeing can be derived. It has said to its subjects, to quote the words of one who has read deeply the signs of the times, "Ce n'est point à vous, faibles individus, de vous conserver, de vous diriger, de vous sauver vous-mêmes. Il y a tout près de vous un être merveilleux, dont la puissance est sans bornes, la sagesse infaillible, l'opulence inépuisable. Il s'appelle l'état. C'est à lui qu'il faut vous adresser; c'est lui qui est chargé d'avoir de la force et de la prévoyance pour tout le monde; c'est lui qui deviendra votre vocation, qui disposera de vos capacités, qui récompensera vos labeurs, qui élèvera votre enfance, qui recueillera votre vieillesse, qui soignera vos maladies, qui protégera votre famille, qui vous donnera sans mesure travail, bien-être, liberté."* It is not wonderful, then, that the French should have contracted the habit of asking and expecting everything—even impossibilities—from their government; and of urging their claims with the confidence and audacity of "sturdy beggars;"—but picture to yourself a people "passionné pour le bonheur," and trained to look for this *bonheur* at the hands of a government which has taught them to demand it, but has no power to bestow it, and then ask yourself what chance of success or permanence can a republic so situated have?

Republicanism and bureaucracy are incompatible existences. You may call your state a republic if you will—you may modify

* Emile Saisset.

its form as you please—you may have two chambers or one—you may place at the head a military dictator, or an elective President holding office for one year, for four years, or for ten ;—but so long as the administration of public affairs remains central and bureaucratic, the utmost that full representation or universal suffrage can give you, is the power of choosing the particular set of busy bodies who shall rule you, or rather the irresponsible individual who shall appoint them. It is not liberty, but merely the selection of your head oppressor. Thus France is in a radically false position, and she has not yet found it out ; she is endeavouring unconsciously to unite two incompatibilities. Her government has all the finished and scientific organization of a despotism, with the political institutions which belong to freedom. Each man has a share in the choice of his legislator and his executive chief ; each man is the depositary of a calculable fraction of the sovereign power ; but each man is the slave of the Passport office, the prefect, the gendarme, and the policeman. The republic of to-day may wake and find itself an empire to-morrow—scarcely an individual Frenchman would *feel* the difference—and not one iota of the administration need be changed. As it exists now, it was the child and may be the parent of imperialism. The whole machinery of autocratic rule is at all times ready for the hand of any one who can seize it.

Again : the national traditions of the French as written in their chequered history—the monuments of regal magnificence and splendour, still so cherished and admired, in the Tuileries, at Versailles, and at Fontainebleau—the inextinguishable taste of the people for gorgeous and imposing shows, and their incurable military spirit,—all combine to make the simplicity of a genuine republic unharmonious, grotesque, and out of place among them. It is manifestly an exotic—a transplanted tree of liberty, which nature never intended to grow out of such a soil. The republic, save for a few short years, is associated with no recollections of historic glory : the times which a Frenchman loves to recall are those of Henri Quatre, Louis Quatorze, and Napoleon—none of them names redolent of liberty. The French are, essentially and above all, a military people. Now, unreasoning obedience to a non-elected and non-deposable chief, an utter abnegation of the individual will, which are the soul of success in war, are direct contradictions to the ideas on which democracies are founded. The passion for external luxury and splendour is incongruous and fatal in a democracy, unless that splendour can be shared by all the people ; yet in no civilized nations is that passion stronger than in France, and in few is the contrast so great between the palaces of their monarchs, (which they still take pride in and adorn,) and the habitations of the other classes of the

community. In England, where the democratic element is so powerful and so spreading, there is little difference either in comfort or magnificence between Windsor Castle and Chatsworth, between St. James' Palace and the noble mansion of Longleat. The palaces of our sovereigns, the castles of our nobility, the halls of our wealthy and ancient commoners, are connected by imperceptible gradations: our Queen might take up her abode at the houses of some of our country gentlemen, and scarcely discover any diminution in the comfort of her accommodations, or the splendour of her furniture. But in France this is not so. Her royal palaces may rival or eclipse ours—certainly we have nothing so immense or gorgeous as Versailles—but the chateaux and hotels of her nobles belong to an entirely different and much lower class than ours. She has nothing to represent that class of mansions, which we count by hundreds, of which Devonshire House, Northumberland House, Belvoir Castle, Drayton Manor, Chatsworth, and Longleat, are the type with us. The character of her social hierarchy as depicted in her dwellings is essentially monarchical: ours is essentially aristocratic. Versailles and a republic would be a standing contradiction—a perpetual incongruity and mutual reproach. They represent, and suggest, wholly opposite ideas.

If this article had not already extended to so great a length, we should have dwelt on other difficulties which beset the task of reorganizing government and society in France; on those arising from the material condition of her people; from the degree of poverty, incompatible with contentment, in which so large a portion of her population live; from the want of a "career," so painfully felt by many thousands of her most active spirits, and so dangerous to internal peace; from the inadequacy of her protected manufactures, her imperfect agriculture, and her undeveloped commerce, to support in comfort the actual numbers on her soil; from the law of equal inheritance, with all its fatal and unforeseen consequences to peace, to freedom, to wealth, to social interests, and intellectual culture; and last, not least, from the fatal necessity, which each new Government that has sprung from a popular insurrection finds itself under, of turning instantly round upon the parties, the ideas, and the principles which have elevated it to power. A Government created by a revolution finds that almost its first task must be to repress revolutionary tendencies; nay more, that it must repress these tendencies far more promptly, more severely, more incessantly, than would be necessary to a Government strong in the loyalty of the nation, in the traditions of the past, in the deliberate judgment of the influential classes, and which was not harassed by the spectre of anarchy daily knocking at its gates. Yet such

a Government—casting down the ladder by which it climbed to office—shutting the door in the faces of undeniable claims—rebuking and punishing the enthusiastic soldiers who had fought for it—imprisoning the friends to whom it owed its existence—fettering and fining the press which had paved the way for its inauguration—has, it cannot be disguised, *primâ facie*, an ugly aspect.

To conclude. The basis of the Governments which owed their origin to the first Revolution was reaction against old anomalies; the basis of the Empire was military power; the basis of the Restoration was legitimacy, prejudice, and prestige; the basis of Louis Philippe's Government was the material interests of the nation, and the supremacy of the bourgeoisie as the depositaries and guardians of those interests. The Revolution of February—being (as it were) an aggressive negation, not a positive effort, having no clear idea at its root, but being simply the product of discontent and disgust—furnishes no foundation for a Government. Loyalty to a legitimate monarch; deference to an ancient aristocracy; faith in a loved and venerated creed; devotion to a military leader; sober schemes for well-understood material prosperity;—all these may form, and have formed, the foundation of stable and powerful Governments: mere reaction, mere denial, mere dissatisfaction, mere vague desires, mere aggression on existing things—never.

To construct a firm and abiding commonwealth out of such materials, and in the face of such obstacles as we have attempted to delineate,—such is the problem the French people are called upon to conduct to a successful issue. Without a positive and earnest creed; without a social hierarchy; without municipal institutions and the political education they bestow; without a spirit of reverence for rights and of obedience to authority, penetrating all ranks,—we greatly doubt whether the very instruments for the creation of a republic are not wanting. A republic does not create these—it supposes and postulates their existence. They are inheritances from the past, not possessions to be called into being by a fiat. They are the slow growth of a settled political and social system, acting with justice, founded on authority and tradition, and consolidated by long years of unshaken continuance.

- ART. II.—1. *The Progress of the Intellect, as exemplified in the Religious Development of the Greeks and Hebrews.* By ROBERT WILLIAM MACKAY. 2 vols. 8vo. London, 1850.
2. *The Purpose of Existence popularly considered, in relation to the Origin, Development, and Destiny of the Human Mind.* London, 1850.
3. *Phases of Faith; Passages from the History of my Creed.* By FRANCIS WILLIAM NEWMAN, late Fellow of Balliol College, Oxford. London, 1850.
4. *The Soul, her Sorrows and her Aspirations; an Essay towards the Natural History of the Soul as the true basis of Theology.* By FRANCIS WILLIAM NEWMAN. 2d Edition. London, 1849.
5. *Culte Systématique de l'Humanité. Calendrier Positiviste, ou Système Général de Commémoration Publique.* Par AUGUSTE COMTE. Paris, 1850.

It is not a little remarkable that the two apparently hostile and antagonist forces—Superstition and Scepticism—have often revived simultaneously in the past history of the Church, and that they have equally striven, especially at certain critical eras, to supersede and supplant “the faith once delivered to the saints.” The fact is certain, but it may be viewed in different lights by different minds. Some may flatter themselves that the antagonism of two such conflicting forces is destined to serve a useful purpose, in the way of neutralizing each other, and preserving the Church in that straight path which is intermediate between opposite extremes of error. Others, taking, as we conceive, at once a more comprehensive and more profound view of the subject, may discern in their simultaneous reappearance an ominous “sign of the times” as a critical era in the history of public opinion, and may trace them equally to the same source, even “an evil heart of unbelief in departing from the living God.” It is true that they are apparently antagonistic; but it is far from being equally evident that they are really opposed, either in the radical principles from which they spring, or in the ultimate issues towards which they tend. For, while Scepticism and Superstition, Infidelity and Popery, are seemingly so diverse, both in their fundamental principles and in their practical results, as to be incapable of being identified with each other, it may still be true, that, like the adverse systems of the Pharisees and Sadducees of old, they may equally indicate the operation of the same evil heart of unbelief, and even tend mutually, not to destroy, but to develop each other. The tendency

of Superstition to induce Scepticism, and of Popery to engender Infidelity, is only too apparent in the case of many of the most cultivated minds in Europe; while the counter tendency of scepticism to fall at last, as an unresisting captive, into the arms of an infallible church, has been illustrated by not a few affecting examples even in recent times. There is, in short, a nearer approximation and a stronger affinity between Infidelity and Popery, than there is or can be between either of the two and vital Evangelical Christianity; and hence, when both reappear simultaneously on the same arena, we have little hope that the one will serve only to neutralize the other: we regard them rather not as "conflicting, but as conspiring forces," which tend equally, although in different ways, to undermine and overthrow all that is most precious to us in a pure Bible Christianity. There is, in short, a mutual reaction between the two; the monstrous additions which Popery has superinduced on Christianity having a tendency to excite scepticism in the minds of reflecting men; while the mere negations of scepticism can never satisfy the instinctive yearnings of the human heart, and must leave it exposed, especially in seasons of danger or distress, and in the immediate prospect of death, to those influences, whether of hope or of fear, by which a Church claiming to be infallible can so easily impose on minds unenlightened by the word and Spirit of God. Popery makes many infidels among the young, the intelligent, the inquiring; but infidelity is so cheerless and gloomy, that popery has still the advantage, when in the progress of life a man feels that he is going to the grave; *then* scepticism may pass at once into superstition; infidelity may be suddenly exchanged for popery; and the laughing Montaigne may die with the host sticking in his throat. Montaigne spoke, indeed, of reposing tranquilly on *the pillow of doubt*; but "the fact is, that in his declining years he exchanged his boasted *pillow* of doubt for the more powerful opiates prescribed by the infallible church, and that he expired in performing what his old preceptor (George) Buchanan would not have scrupled to describe as an act of idolatry."*

We are now threatened with danger from each of these sources. At the present moment we are exposed to a fresh invasion of Popery, and involved in a wide-spread national agitation against its arrogant pretensions; and, simultaneously with this inroad of superstition from abroad, there has been a remarkable revival of certain Forms of Infidelity at home. The public mind, engrossed and absorbed by the one exciting theme, may have been comparatively negligent of the other; and hence

* Dugald Stewart's Preliminary Dissertation to the *Encyclopædia Britannica*, 51.

many seem to be too little alive to the fact, that works have recently issued from the British press, and are obtaining extensive circulation in certain circles of cultivated society, whose avowed object is to extirpate all faith in the supernatural; to account for the origin of every form of religion, not excepting Christianity itself, on purely natural principles; to undermine all creeds, and overthrow every existing form of worship; and to substitute for them either the simplest and most practical code of utilitarian morals, or the vague and mystic generalities of Pantheism. These works are widely different, too, from the spawn of vulgar infidelity which came forth after the first French Revolution, and which carried along with them their own antidote, at least to minds of refined culture, in their pervading grossness and scurrility, so offensive to good taste; they are generally the productions of men who have received a polite education; who are well versed in classical literature, and not ignorant of modern science; who have acquired a style, characterized, in some cases, by vigour and out-spoken plainness, in others, by a seductive and semi-poetic sweetness, and in almost all, by a freshness and perspicuity which can hardly fail to attract and interest that larger class of readers who are intent only on something that is new and exciting. There is reason to believe that, in some quarters, they have already exerted a most pernicious influence; and that their attractive titles have obtained for them a too easy admission into circles where they would never have been admitted, and still less allowed to pass without warning into the hands of the young and inexperienced, had their real character been known.

This must be our apology for introducing to the notice of our readers a class of works which we deem peculiarly dangerous, but whose existence we cannot, as journalists, altogether ignore.

The first work on our list is, "**THE PROGRESS OF THE INTELLECT**, as exemplified in the Religious Development of the Greeks and Hebrews," by Robert William Mackay.

When we rose from the perusal of this elaborate and somewhat heavy work, we found ourselves asking in sorrow, if not in anger:—What! is it really come to this—that Christianity must fight over again her old battle with Paganism, and that too on the soil of England, and in the light of the 19th century? Not that Mr. Robert William Mackay is a Pagan; for he makes no such profession, and beyond what he is pleased to tell us, we know nothing about his religious views; but he is evidently, in so far as concerns a supernatural revelation and the special claims of Christianity, a thorough infidel; and has much less faith in the inspired oracles of God, than in the allegorical in-

terpretations of ancient heathenism, by which the earliest philosophical antagonists of Christianity attempted to retrieve a falling cause, and to arrest the progress of the new religion.

The aim of his work is to account for the origin of the various forms of religion, including the Jewish and the Christian, on purely natural principles, without the recognition of any *supernatural Revelation*, and even, perhaps, of any *supernatural Being*. He attempts to do so by applying the theory of myths alike to the systems of Polytheism and the Scriptures of Truth; all mythology being, in his estimation, "but the exaggerated reflection of our own intellectual habits." The Polytheism of the Greeks and the Christianity of the New Testament, were equally the products or creations of the human mind; and each of the two may be satisfactorily accounted for by the same natural law or tendency which leads mankind everywhere and in all circumstances to give form and body to their ideal conceptions, to personify abstractions, and to endow these imaginary beings with attributes akin to their own. In attempting to develop this fundamental idea, he not only compares the mythology of the Greeks with the mythology of the Hebrews, as contained in the Jewish and Christian Scriptures, but he places both *on precisely the same level, and ascribes them to a common origin*. This mixture of things sacred and profane; this elaborate comparison of the follies of Polytheism and the horrors of Pagan idolatry with the sublime doctrines of Revelation and the pure rites of Christian worship, is one of the most revolting features of the work, and one of the worst symptoms also of the author's state of mind. We can conceive nothing more offensive than any attempt to represent Jehovah the God of the Bible, as bearing a resemblance either to Zeus, "the Moral God of the Greeks," or to Moloch "the revengeful God of the Ammonites;" and yet this writer does not hesitate to say "that the stern and revengeful Deity of the Old Testament, who is acknowledged author of evil as well as good, is in many respects similar to the arbitrary monarch of Olympus, guarded by the children of Styx, Force, and Jealousy, and parent of Ate, the genius of infatuation and its direful results." And this is only a specimen of innumerable comparisons of a similar kind, which are as groundless in respect of truth as they are offensive in point of taste.

To review the work and to refute it at length, were an irksome and perhaps unprofitable task. We shall merely indicate the general outline of the hypothesis, and advert to a few points at which it comes into direct collision with the great principles both of Natural and Revealed Religion.

The author proceeds on the assumption that all religion, of whatever kind, is and can only be a form of **SYMBOLISM**; since

“to rude men, deficient in precision of language as of ideas, abstract conceptions could be conveyed only by physical representations and visible forms”—hence “symbols became the almost universal language of ancient theology”—and “poetry, or the articulate expression of this silent but universal symbolism, was accounted the language of the gods, and of divinely inspired men.” And hence, too, “the patriarchs and their attendants assigned a visible form to the Almighty; they saw and spoke to him, and believed him to be present in images and stones.”

This natural symbolism gave birth to the various forms of *idolatry*; for “although the religious sentiment is essentially one,” “yet those representative forms and symbols which constitute the external investiture of every religion, make its forms as various as the possible modes of its expression, branching into an infinite diversity of creeds and rites.”

But the same symbolism which at first gave birth to idolatry produced, at a later stage in the process of human development, a pantheon of personal gods, each possessing a certain character, and invested with an historic interest. This was the proper product of *mythology*; for “there was a wide interval between the use of a metaphorical symbolism, and the formation of an abstract theology; the intermediate space in the history of intellectual development is occupied by mythology. This venerable deposit of the oldest thoughts arose when *facts and opinions* were wholly unsevered, when notions assumed unquestioned the disguise of existences and deeds, and when all abstract speculation fell naturally into the form of *narrative*.”

As yet we seem far removed from the simplest monotheism, and still farther from the sublime scheme of Christian theism; but these will follow each in its own turn. For “*nature* was deified before *man*,” but in due time “*man* deified himself,” by personifying his own abstract idea of reason, or intelligence, or order; for “the last stage of religious development is the matured consciousness of intellectuality, when, convinced that the internal faculty of thought must be something more subtle than even the most subtle elements, he transfers his new conception to the object of his worship, and *deifies a mental principle instead of a physical one*. He is, however, unable to remain long in the regions of abstraction, and being experimentally acquainted with no spiritual existences distinct from his fellow-men, his imagination cannot picture anything more exalted than a being similar to, though more perfect than himself. It has accordingly been remarked, that instead of “God making man,” we ought to read, “man made God after his own image.”* Still

* We omit the blasphemous allusion to “the ideal of some eminent University professor.”

this is only a new form of symbolism, nay, of idolatry, for "spiritualism itself is only a higher form of personification," "and the idea of deity has a natural tendency to assume that noblest form of symbolism—*personification*." "We often hear complacent self-congratulations on the recognition of *a personal God*, as being the conception most suited to human sympathies, and exempt from the mystifications of pantheism. But the divinity remains still a mystery, notwithstanding all the devices which symbolism, either from the organic or inorganic creation, can supply, and *personification is a symbol* liable to misapprehension, as much, if not more so, than any other." "Every man worships a conception of his own mind," and "all idolatry," says Carlyle, "is only comparative: the worst idolatry is only more idolatrous."

Thus Symbolism, giving birth in the first instance to material idolatry, and then passing through mythology into polytheism, rises at length into its highest form, the recognition of a personal God, which is still, however, only a new product of the same natural tendency, a later result of the same intellectual law.

Is there, then, any supernatural being? or any form of religion that is more true than another? The one universal religion, of which all varieties of creed and worship were only so many modifications, was PANTHEISM. Nature was deified before man, and man was deified as a part of nature. "Pantheism includes many varieties of refinement; it may blend God with nature, or raise nature to God; it may be materialism or idealism, spiritualism or personification. For personification, if not immediately present at the origin of religion, is at least closely connected with it, the mind requiring the imagery of the senses in order to develop its conceptions, and the symbol of man himself being one of the most obvious and satisfactory means of doing so." "Theological philosophy is perhaps only another name for pantheism." "Nature-worship, in its thousand forms, retains its ancient claim to equal and unequivocal respect. Of these varied forms one of the most memorable is that which it assumed in the early history of the Hebrews (!)" "Objections to Pantheism . . . imply ignorance on the part of the Christian objector as to *the nature of his own creed*."—(Acts xvii. 28.) !

Of course when both Judaism and Christianity are declared to be mere forms of Symbolism, or varieties of Pantheism, all belief in the supernatural is at an end, and the whole history, both of the Old and New Testaments, must be explained as a mere series of Myths. The authenticity of the books of Scripture must be assailed, their inspiration denied, and even ridiculed, the non-reality and absolute impossibility of miracles affirmed, and prophecy so explained and applied as to invalidate

its evidence. All this is attempted by Mr. Robert William Mackay, in a style of daring hardihood such as has been seldom exemplified of late years in this Christian land.

There is no originality in his views. He is indebted for most of his arguments to the writings of Dr. Strauss and Auguste Comte; but they are reproduced with the accompaniment of a vast array of miscellaneous learning. He is equally indebted to older infidels than these; for it struck us forcibly that he has adopted the arguments by which Porphyry and Jamblichus sought to defend Polytheism against the primitive apologists for Christianity; and that he has adopted also that method of explaining Old Testament prophecy, to which the rabbinical writers had recourse in opposition to the Messianic interpretation of it. His theory of *relative* as opposed to *absolute* truth, and his doctrine of *natural laws*, as applied in disproof of the possibility of miracles and the efficacy of prayer, are derived from the more modern schools of infidelity, which are too philosophical to believe, even on the authority of Scripture, what was held to be perfectly consistent with reason by the profounder intellects of Bacon, and Boyle, and Butler. But we greatly err if he has not been indebted most of all to the "*ORIGINE de tous les Cultes, ou Religion Universelle*," by DUPUIS;* a work which proceeds on the idea that the universe is the only God, and that every particular form of religion may be accounted for by ascribing them all to the same origin,—viz., to the observed course of the sun, in its relation to the seasons of the year and the labours of agriculture; the twelve patriarchs and the twelve apostles being equally representative of the twelve "Signs of the Zodiac!" Dr. Priestley himself, although assuredly no fanatic, could say of the "*Origine des Cultes*," as we are disposed to say of "*The Progress of Intellect*," that "a work bearing more marks of deep erudition, more ingenuity, or more labour, *though accompanied with little judgment*, has hardly ever appeared. But I am inclined to think with Festus concerning Paul, that *much learning has made him mad*, and deprived him of the use of his reasoning powers. This must either be his case, or that of all the world besides, and whether he be right or wrong he will be outvoted. We must either adopt this hypothesis, or say that his work is a mere *jeu-d'esprit*, that he was not in earnest in writing it, but wished to make an experiment, how far confident assertion, and an appearance of deep learning accompanied with ingenuity, could go in imposing on the world. But this work is too large and too dull to be a *jeu-d'esprit*.

* Paris. In 3 vols. 4to, with a supplementary volume of plates. "L' an III. de la République, une et indivisible, Liberté, Egalité, Fraternité."

The other hypothesis, therefore, which is the only alternative in the case, is the more probable of the two. For, if he be in earnest, his mind must have suffered a considerable degree of derangement.”*

The second work on our list is, “**THE PURPOSE OF EXISTENCE** popularly considered, in relation to the Origin, Development, and Destiny of the Human Mind.”

This singular work is published anonymously, and we know nothing of the author except what may be inferred from some incidental statements occurring in these pages, which serve to indicate his social position and his past pursuits. He tells us in one place, that it was written at a splendid country seat in Ireland, which he describes as “the deep seclusion, whence my solemn warnings are uttered, and (where) the response given to them may, perhaps, never reach me.” He tells us in another, that, at an early period, he met and conversed with Dr. Samuel Parr; and, in a third, that these lucubrations are the result of fifty years’ careful study, and that for thirty of these years he had been actively engaged in popular election contests. These hints are sufficient to indicate, even were there no evidence in the work itself to prove, that the author has moved in the higher circles of society, and that he still occupies an influential position in his retirement.

The opinions of such a man, expressed as they are with great frankness and force, and urged with the vehement earnestness of deep-seated conviction, must exert no inconsiderable influence on the public mind for good or for evil. In many of his views respecting our present social condition, the evils which exist in it, and the strong remedies which must be applied, if these evils are to be removed or even mitigated, we cordially concur; but we deeply regret that he should have thought it necessary to mix up the discussion of these practical topics with a statement of certain speculative notions, which must be painfully offensive to every believing mind, and which are fitted, in a Christian community, to excite prejudice against any cause with which they are thus associated. Without entering into the details of his doctrine, we shall merely exhibit an outline of his views on *four* of the most important subjects of human thought:—the origin of the material world, the origin of the human mind, the origin of moral evil, and the origin of the Christian System.

In regard to the first of these topics—the origin of the mate-

* A comparison of the Institutions of Moses, with those of the Hindoos and other ancient nations, with remarks on M. Dupuis’ “Origin of Religions.” By Joseph Priestley, LL.D. 1799.

rial world, the author makes it sufficiently plain, that while he acknowledges a Supreme Intelligence, he denies the doctrine of a Creation, properly so called, and holds that matter is eternal and indestructible. He disclaims Atheism, and of course his disclaimer must be received: but, like the author of "*The Vestiges*," he defends the Nebular hypothesis as a method of explaining the origin of the planetary system, while he accounts for that of vegetable and animal life by *natural law*, and affirms that the Divine Power has *never acted otherwise* than, as at present, through the agency of *secondary causes*. Indeed, Creative Power is defined as "the Supreme Intelligence, acting by secondary causes." Of course, matter is self-existent and eternal: it never began to be, and it can never be destroyed,—“it is, perhaps, most probable,” he says, “that infinite material worlds have existed from all eternity.”

The eternal existence of matter being assumed, the author conceives that he can account for the origin of all its vegetable and animal tribes by natural law, without any direct interposition on the part of God; for while “it may be true that there are no secondary causes now in operation adequate to the spontaneous generation of plants or animals”—yet such causes may have operated in a prior state of our system, when it was undergoing those vast changes which geology has disclosed.

The production of man must be held to be the *experimentum crucis* of any such theory: and our author, faithful to his great principle, fearlessly grapples with this problem, and attempts to account, on purely natural grounds, for the origin of the human mind. Were it not so sadly serious, his expositions on this point might provoke a smile. He tells us that there is a self-dynamic *spirit* in matter—that it is *spirit* which sets matter in motion; that when “a cork is forced out of a bottle by the inclosed liquor,” the particles are “put into the motion of fermentation, and expanded by spirit.” This is what he calls “the spirit of vitality” which exists in vegetables, and is transfused into animals who are nourished by vegetable food,—of course also into carnivorous animals,—by a process which must ever remain one of nature’s awful mysteries, but which is sufficiently exhibited to proclaim “one of her great working principles to be, that *spirit is evolved out of matter*, and outlives the body in which it is educated.” “This,” he tells us, “may almost be regarded as a demonstrated truth. Matter is full of spirit. This spirit is brought out of matter by vegetation. By means of vegetation it is conveyed into animal frames, in which its purest essence centres in the brain.” “This spirit thus conveyed to the brain, evolves, according to its various degrees, successive orders of faculties, limited in the lower animals to their first grades,

but in man presenting to our consideration three orders," including consciousness, memory, reason, &c. "The spirit of vitality, first drawn out of matter by vegetation, and imbibed by him either directly from esculent herbs, or indirectly from the animals slaughtered for his use, is refined by his more perfect organs, and his subtler absorbents, into an intellectual essence!" Nay, the one grand *purpose of the universe*, is "the evolvment of mind out of matter." "Progression, evolving mind out of matter is the end of being, the purpose of the great First Cause, in ordaining and maintaining that series of secondary causes and effects which we call Creation." The author advances this theory with amazing confidence, and yet seems occasionally sensible that it may provoke no little ridicule, as when he anticipates the objection that "the immortal soul" can scarcely be supposed to be brought into the body by the aid of "*salads and Sauer-kraut*:" but he is proof against everything of this kind, and boldly affirms, without the slightest consciousness of an equivocal use of language, "the power that stirs the leaf of a plant, without external mechanical agency, is *the same in its nature* as that which raises the finger of man—weak and imperfectly developed indeed—still there it is;" and there we shall leave it, not caring at present to discuss the difference between one kind of spirit and another, or to demonstrate that alcohol is not intelligence!

To one who has accounted so satisfactorily for the production of the human mind, the problem of the origin of evil could present no very formidable difficulty; and accordingly he solves it in a trice. The fables of the Fall and of Original Sin are discarded at once as absurd legends:—and all evil, moral and physical, is traced to the imagination as its prolific source,—imagination which gives birth to "unreal wants," and which was "the original motive power of the human mind to exceed the first wants of nature." Hence the origin of wealth-worship; of luxury; of the love of rank, and fame, and power: and hence all the desolating evils which followed in their train, and which have inundated both Church and State. Christianity itself has done little to check the progress of these evils, and has even, as it has been commonly taught, tended to aggravate and perpetuate them; but the true remedy is to be found in the reign of reason, which will dispel the delusions of the imagination, and constrain men to live according to the rules of practical morality in the view of a future state of being, as taught by Jesus of Nazareth.

Here, however, the author approaches a topic which requires discreet handling, and, lest he should be mistaken for a Christian, in the common sense of the term, he enters into an ex-

planation of his views, from which it is sufficiently plain that his creed, however elevating he may fancy it to be, is at least one of very scanty dimensions. He professes, indeed, the utmost reverence for Jesus of Nazareth:—"All that I believe, all that I have said, and all that I have yet to say, I have learned from one to whom I look up as to the wisest and most perfect *mortal* that ever lived,—from Jesus of Nazareth himself—purest, holiest of *created* beings!" "His character was the purest, the noblest, the most exalted, that can be found in the entire history of the world." But admiring Jesus as a man, he does not acknowledge him either as the Son of God, or as THE CHRIST: the latter epithet was not applied to him during his life, and was only appended to his name after his *supposed* resurrection: he was crucified, but crucifixion was not necessarily destructive of life—he swooned merely, but did not die, and in this state of *apparent* decease he was taken from the Cross. Pilate and the Roman authorities had a "complicity in the escape of the intended victim to a fanatical persecution which they disapproved, but could not openly oppose;" and "the caution with which, for a short time, Jesus of Nazareth afterwards conversed with a few of his followers, and *his speedy retirement from public observation*, show that the life, *thus preserved*, should not be exposed to further danger." But when he re-appeared among his disciples, his *seeming* resurrection gave rise to mythical stories which were afterwards recorded in the Christian Scriptures: and not only was his resurrection attested, but his divinity also affirmed. Christianity *in this sense* arose first at Antioch, and "the men from Cyprus and Cyrene, but more especially LUCIUS of the latter place, were THE TRUE authors of Christianity!" The present gospels were written after this change had occurred; and have incorporated the philosophical doctrines of Platonism with the pure precepts of Jesus: and there can be no return to primitive religion as taught by him, otherwise than by the unsparing excision of all the distinctive peculiarities of Christianity, as it has existed since the days of the Evangelist John, and the adoption of the theory of progress in connection with the simplest rules of practical duty. For all true religion is reduced to "a simple, intelligible digest of practical morality, designed to spiritualize human nature, and train mind for its separate and independent state of being, when liberated from its school of matter;" and "the whole religion promulgated by Jesus of Nazareth is,—to love God, and to love our fellow-creatures, and by the full evolvment of these and their collateral duties, to fit ourselves for the future existence which is our destination." Jesus performed no miraculous works, and taught no supernatural truths: he was a good man, and an excellent moralist,

who taught men to live here in the view of a future state of being. *Voilà tout.*

Can it be necessary, in the present enlightened age, to offer an elaborate refutation of such an hypothesis as this? Are there many minds in the reading community so ignorant or unreflecting as to be incapable of discerning the groundlessness of its assumptions, or detecting the fallacies of its reasonings? May not the mere exposition be a sufficient exposure of it? Or if more be required, is it not enough merely to indicate such points as these—the assumption of the eternal existence of matter, and of creation exclusively by Natural Law: the attempt to identify mind with a vital spirit existing in vegetables, extracted by animals, distilled by their peculiar organs, till its purest essence centres in the brain and constitutes the soul of man: the further attempt to account for the origin of evil by ascribing it entirely to the imagination, or a sense of “unreal wants;” and the worse than Socinian, the thoroughly infidel theory of the origin of Christianity, which represents the Saviour not only as a mere mortal man, but as one who did not die even a martyr’s death, and who must have had some “complicity” with Pilate, in managing those events which led to the story of his resurrection. On all these points, and many more, the author founds on the most reckless and unauthorized assumptions, and seems to have no faculty for appreciating the weight either of philosophical or historical evidence. His grand discovery, that *Lucius of Cyrene was the true author of Christianity*, is certainly original, but we question whether it will greatly contribute to his renown.

But we must pass on to a writer of a different class, whose personal history is one of deep and painful interest. Mr. Francis William Newman, late Fellow of Balliol College, Oxford, has recently published two works of an infidel tendency: the one entitled “PHASES OF FAITH; or Passages from the History of my Creed;” and the other, “THE SOUL, her Sorrows and Aspirations; an Essay towards the Natural History of the Soul, as the true basis of Theology.”

It was long ago remarked by the acute and learned Bishop of Cæsarea, that there are certain critical eras in the history of religion, when the public mind undergoes a revolutionary change, and when men who are not converted by the truth, fall off and diverge from it, but by two different and even opposite routes—the one leading to superstition, the other to scepticism; religion being exchanged for Ritualism in the former case, and for Rationalism in the latter. He tells us that in his own age,—the age of keen conflict between declining Polytheism and advancing Christianity, when the power of divine truth came

home to the minds of the adherents of the ancient system, but without effecting a saving change, "multitudes of those who had been previously buried in superstition, were awakened out of their dreamy slumbers, and their eye being opened, they began to perceive the deep deception of their hereditary faith: but trusting to their own light, they were led, even while they departed from the ancient road, by the different course which their reasoning took, to follow one or other of *two opposite routes*: some, disengaging themselves entirely from the whole system of fables, vilified and ridiculed the doctrines of their ancestors: others, shunning the reputation of Atheism, could neither maintain the doctrine which had been previously admitted, nor altogether abandon it, and therefore proposing to flatter the commonly received opinions, and to use them as allegories, they declared the histories of those who passed for gods in their country, to be fables invented by the poets; and they dressed them up in certain physical explanations."* A partial revival of the form and ritual of Paganism was effected for a time by the allegorical interpreters of its symbols; while a deep-seated and growing scepticism was secretly undermining the foundations on which it reposed.

We know not that this twofold tendency towards a superstitious Ritualism on the one hand, and a sceptical Rationalism on the other, which seems to be incident to a critical era like the present, has ever been more strikingly or more instructively exemplified, at least in modern times, than in the case of the brothers NEWMAN. The one a polished Churchman, a proficient scholar, and an attractive preacher; impressed, too, in some measure by the truth, and devoted to the service of the Church,—recoiled, nevertheless, from the simplicity of the truth as it is in Jesus,—betook himself, for relief, to the doctrine of the Church and the sacraments,—found congenial food in the traditions of primitive times, and congenial employment in the defence of Episcopacy as an apostolical succession, and of baptism as a regenerating rite; till having exhausted the ritualism of the Church of England, and still thirsting for more, he passed over into the Church of Rome, and became, as a bishop of that communion, a sworn defender of its antichristian creed and worship. The other, the younger brother, himself a student at Oxford at the time when the elder was still resident there and was fast rising into reputation and influence among the adherents of the Tractarian movement,—a thoughtful and accomplished, but independent and inquisitive man,—acquainted in early life with the leading doctrines of evangelical religion, and

* EUSEBI: *Præparatio Evangelica*: lib. ii. c. iv.

imbued to some extent with a spirit of religious earnestness, recoiled also, as his autobiographical sketch too sadly proves, from the simplicity of Christian truth; but taking a course directly contrary to that of his senior and more celebrated brother, descended from step to step until he reached the lowest level of unbelief, and divested himself of every shred and fragment of historic faith in the truth of Christianity.

The "Phases of Faith, or Passages from the History of my Creed," trace the progress of Mr. Francis Newman's declension from something like an evangelical profession to the gulf of utter unbelief, in a way which we have felt to be at once painfully interesting and deeply instructive. His early intercourse with men holding evangelical opinions, and the influence which they seem for a time to have exerted over his mind, serve only to cast a deeper shade of melancholy over his subsequent aberrations; while the vigorous activity of his inquisitive mind, and the freshness and perspicuity of his manly English style, lead us to regret that one so well qualified to be an eloquent advocate for saving truth should have become an avowed abettor of deadly error. But he could not all at once throw off his former creed, or reach, *per saltum*, the unhappy position in which he now stands. He seems to have been first staggered at his "confirmation," when the examining chaplain tested his *memory* rather than his *faith*, and when the bishop himself appeared to him "a *made-up* man, and a mere pageant;" and this impression was deepened when he was called to subscribe the Thirty-nine Articles at Oxford in order to be admitted to the University; for although to himself "subscription was no bondage, but pleasure," yet, knowing that "very few academicians could be said to believe them, and that of the young men not one in five seemed to have any religious convictions at all," he felt "that the system of compulsory subscription was hollow, false, and wholly evil." This was the crisis of his mental history; and from this point he gradually descended, discarding one doctrine after another, till he retained not one of the distinctive truths of Christianity. But the progressive aberration of his mind is deeply instructive, and affords a sad commentary on the truth of the adage,—"*Facilis descensus Averni.*" He began by doubting and at length discarding the doctrine of Christ's imputed righteousness, still clinging, however, to that of his vicarious sufferings and atoning death; then he was led to question the reality of Christ's human nature after his ascension; then the sanctity and permanent obligation of the Sabbath, for which he had previously "endured a sort of martyrdom," and "fallen into a painful and injurious conflict with a *superior kinsman*, by refusing to obey his orders on the Sunday;" then the authority of the Old

Testament Scriptures, which were treated, like the ceremonies of the former dispensation, as "weak and beggarly elements;" then the doctrine of the Atonement; then the Athanasian Creed; then the rite of infant baptism; then the authority of the Episcopate; then the doctrine of the Trinity; then the validity of the historical evidence; then all the peculiar doctrines of Calvinism; then the eternal punishment of the wicked; then the Incarnation, and the sinlessness of the Saviour; then the Canon of the Old and New Testaments, and generally the *letter* of Scripture, with its authenticity, inspiration, and infallible authority; then the evidence of miracles and of prophecy. Still Christ remained, and, as he thought, some doctrines concerning Christ. But at length his historic faith broke down altogether, and Christ, as well as Satan, disappeared entirely from his mental view. "My historical conception of Jesus had so gradually melted into dimness, that He had receded out of my practical religion, I knew not exactly when." "Christ and the devil had thus faded away out of my spiritual vision; there were left the more vividly God and man."

His sad career need scarcely be traced further. It may be instructive, however, to notice that long after he had discarded many of the most peculiar and fundamental principles of the Christian faith, he still spoke, with apparent warmth, of his reverence for Scripture; and even when he had conclusively abandoned all historic faith in the miracles of Scripture and the Messiahship of Jesus, he still held that he might possess the substance of Christianity. When he had given up the Bible, he writes, "Many persons will be apt to say, 'of course, then, you gave up Christianity?' Far from it. I gave up all that was clearly untenable, and clung the firmer to all that still appeared sound." And even at a later stage, when Christ was abandoned as well as the Bible, he still clung to the belief that he had, or might have, whatever was essential to true spiritual religion; for "religion is a *state of sentiment* toward God," a sentiment which pervades the Bible, but which is implied everywhere, viz., "*the intimate sympathy of the pure and perfect God with the heart of each faithful worshipper.*"

This is a mournful history; and all the more when it is viewed in the light of contrast with the opposite course of the elder brother, to whom some touching allusions are made in these pages, which can hardly fail to be read with deep interest. Thus at an early stage he writes—

"One person there was at Oxford who might have seemed my natural adviser; his name, character, and religious peculiarities have been so made public property, that I need not shrink to name him;—I mean my elder brother, the Rev. John Henry Newman. As a warm-

hearted and generous brother, who exercised towards me paternal cares, I esteemed him and felt a deep gratitude; as a man of various culture and peculiar genius, I admired and was proud of him; but my doctrinal religion impeded my loving him as much as he deserved, and even justified my feeling some distrust of him. He never shewed any strong attraction towards those whom I regarded as spiritual persons; on the contrary, I thought him stiff and cold towards them. Moreover, soon after his ordination, he had startled and distressed me by adopting the doctrine of Baptismal Regeneration; and, in rapid succession, worked out views which I regarded as full-blown 'Popery.' I speak of the years 1823-6. *It is strange to think that twenty years more had to pass before he learned the place to which his doctrines belonged.*" "In the earliest period of my Oxford residence, I fell into uneasy collision with him concerning Episcopal powers. I had on one occasion dropped something disrespectful against bishops or a bishop—something which, if it had been said about a clergyman, would have passed unnoticed—but my brother checked and reprovved me—as I thought, very unconstructively—for 'wanting reverence towards bishops.'" "To find my brother thus stop my mouth, was a puzzle, and impeded all free speech towards him. In fact, I very soon left off the attempt at intimate religious intercourse with him, or asking counsel as of one who could sympathize. We talked, indeed, a great deal on the surface of religious matters: and on some questions I was overpowered, and received a temporary bias from his superior knowledge; but as time went on, and my own intellect ripened, I distinctly felt that his arguments were too fine-drawn and subtle, often elaborately missing the moral points, and the main points, to rest on some ecclesiastical fiction: and his conclusions were to me so marvellous and painful, that I constantly thought I had mistaken him. In short, he was my senior by a very few years; *nor was there any elder resident at Oxford*, accessible to me, who united all the qualities which I wanted in an adviser."

Again, at a later stage, we find him saying—

"Now began a time of deep and critical trial to me and to my creed. The Tractarian movement was just commencing in 1833. My brother was taking a position in which he was bound to shew that he could sacrifice private love to ecclesiastical dogma; and upon learning that I had spoken at some small meetings of religious people, (which he interpreted, I believe, to be an assuming of the Priest's office), he separated himself entirely from my private friendship and acquaintance. To the public this may have some interest, as indicating the disturbing excitement which animated that cause; but my reason for naming the fact here, is solely to exhibit the practical positions into which I myself was thrown. In my brother's conduct there was not a shade of unkindness, and I have not a thought of complaining. My distress was naturally great, until I had fully ascertained from him that I had given him no personal offence."

And again, at a still later period—

“How many of my seniors at Oxford I had virtually despised, because they were not evangelical! Had I had opportunity of testing them spiritually? or, had I the faculty of so doing? Had I not really condemned them as unspiritual barely because of their creed? My heart smote me on account of one. I had a brother, with whose name all England was resounding for praise or blame: from his sympathies, through pure hatred of Popery, I had long since turned away. What was this but to judge him by his creed? True, his whole theory was nothing but Romanism transferred to England: but, what then?” “My brother surely was struggling after truth, fighting for freedom to his own heart and mind, against Church articles and stagnancy of thought. For this he deserved both sympathy and love; but I, alas! had not known and seen his excellence. But now God had taught me more largeness by bitter sorrow, working the peaceable fruit of righteousness. At last, then, I might admire my brother. I therefore wrote to him a letter of contrition. Some change, either in his mind or in his view of my position, had taken place, and I was happy to find him once more able, not only to feel fraternally, as he had always done, but to act fraternally. Nevertheless, to this day *it is to me a painfully unsolved mystery, how a mind can claim its freedom in order to establish bondage.* For the *peculiarities* of Romanism I feel nothing, and I can pretend nothing, but contempt, hatred, disgust, or horror. But this system of falsehood, fraud, and unscrupulous and unrelenting ambition will never be destroyed while Protestants keep up their insane anathemas against opinion.”

The case of the two brothers suggests some seasonable lessons as to the present practical duty of the Government and people of England. The first and most urgent duty of both is to secure a radical reform in the universities of Oxford and Cambridge—so as to prevent, if possible, the increase both of superstition and scepticism in institutions which ought to be nurseries alike for the Church and the Commonwealth. We have no hesitation in saying, that whatever arguments may be urged in defence of subscription to articles on the part of *the teachers*, no good reason can be alleged for the compulsory imposition of subscription on *the students*, as a condition for their receiving the benefits of a university education, and that its effect on the minds of many is deeply injurious. But the abolition of the students' test will be of little avail, unless also some more effectual provision can be made for a sound system of theological education. Had there been three such men in Oxford as Owen, Baxter, and Howe, at the commencement of the Tractarian heresy, it would have been nipped in the bud. At present, the course of preferment lies not from the church to the university, but from the university to the church; and hence the men of age and standing and influence are draughted off,

instead of being left to devote their lives to the training of an educated and pious ministry. This is a grievous evil; and we see the effect of it in the lamentable perversions over which the Church of England has so much reason to mourn.

The fact that two brothers, both eminently gifted, and both educated at the same seat of learning, have equally abandoned the Church of England, and gone over, the one to Popery and the other to Infidelity, is surely fitted to awaken some inquiry in regard to the method of education which prevails at that venerable seat of learning, and to suggest the necessity of some more effectual provision for a thorough course of apologetic and systematic theology. It is quite apparent from the recorded history of Mr. Francis Newman's creed, that he had not been thoroughly instructed in any one branch either of the evidences or of the doctrinal truths of revealed religion. He tells us himself, indeed, with amiable and somewhat amusing simplicity, of the occasion on which he opened in a gentleman's library a presentation copy of a Unitarian Treatise, and adds, "It was the first Unitarian book of which I had even seen the outside, and I handled it with timid curiosity as if by stealth." We submit, that this is not the way in which the Church can hope to rear a race of manly, vigorous theologians, adequate to the exigencies of the present critical times—that students of theology must be so trained as to acquire a competent knowledge, not only of the doctrines which they are afterwards to teach, but also of the systems to which these doctrines are opposed; and that, in any well-regulated and really effective course of theological education, they should not be required to take their information on these subjects on trust or at second-hand, but should be permitted and even encouraged to become acquainted with the best writers in support of heterodox opinions; with Bellarmine and Socinus, with Arminius and Episcopius, not less than with Melancthon and Calvin, or Witsius and Owen. *Fas est etiam ab hoste doceri*: and assuredly the Romish Church does not send forth her priests and missionaries unfurnished with that information which is necessary to fit them for meeting on the arena of controversy with the ablest opponents of their system, and which can only be gathered from a careful study of the principal works which have appeared in explanation or defence of the Protestant cause.

In the present state of Europe a loud call is addressed to all the Churches of the Reformation for combined action and systematic effort in defence of the bulwarks of their common faith; and for such a course of thorough theological education as may serve, under the Divine blessing, to qualify their future ministers for the great and final struggle which seems to be so near

at hand. For the works which have recently emanated from the British press are not to be regarded merely as individual and isolated cases of infidelity, but as specimens of a style of thought, or rather as symptoms of a spirit of speculation, which pervades a large and growing class in the community, and which, unless it be speedily arrested, may issue in a wide-spread and desolating infidelity. In proof of this we need scarcely refer to any other evidence than that which is furnished so abundantly by the voluminous speculations of Auguste Comte. Of the high merits of this writer, considered simply as an expounder of physical science, we are disposed to speak with the utmost admiration and respect: for few have appeared in modern times who have exhibited such a profound knowledge of its various departments or of their mutual relations, and none who has an equal power of expressing his thoughts in clear, terse, and vigorous language. But M. Comte is not only a declared unbeliever in Christianity, and an avowed atheist; he is, or wishes to become the founder of an infidel *Propaganda*; and has constructed a scheme by which he hopes to unite the leading nations of Europe in opposition to the Christian Church, and in support of a new and hitherto unheard-of worship. In his ponderous work, entitled, "A Course of the Positive Philosophy," extending to six densely-printed volumes, and comprising a vast amount of scientific speculation, he had announced the great fundamental law of human development, by which, as he conceives, society must necessarily pass through several successive states, commencing with Fetichism, and reaching through the intermediate stages of Polytheism and Monotheism,—that critical era in which all theology must disappear under the powerful solvent of metaphysics, and at length be superseded entirely by Positivism, which, recognising neither efficient nor final causes as legitimate subjects of human inquiry, should confine itself to the observation of facts, and their co-ordination under general laws. And in a more recent tract, whose title we have prefixed to this article, he has announced the scheme of public commemoration, which he proposes as a substitute for Christian worship. The present state of the Positive philosophy may seem, indeed, to afford little ground for his confident hopes; for M. Comte makes the *naïve* confession, incidentally, but not the less truly, that hitherto "the Positive School" consists of himself alone—(*l'Ecole Positive jusqu'ici essentiellement réduite à moi seul*;) but the solitary thinker has sublime visions before him: he proposes to found an atheistic community in the world, the true "Church of the Future," which shall be duly organized, and furnished with a hierarchy of suitable office-bearers. There must be the institution of a spiritual class or priesthood, distinct from and in-

dependent of the temporal power; there must be a vast society, not national, but cosmopolitan, framed as nearly as possible after the model of Catholicism, which is regarded as the noblest product of the wisdom and policy of the past. This society, abjuring all theology, and cultivating only the various branches of science, is destined ultimately to regenerate the world. It may have, like the Romish hierarchy, a Pope or elective chief; perhaps also an order of celibacy, and a set of monastic institutions, but will differ from it in the total negation of the theological element, while it will aim at the same universal ascendancy, and retain all its most powerful engines of public influence. It must be limited, in the first instance, to the *élite* or advanced guard of humanity, and will be satisfied with Europe as the present field of its operations, while it cherishes the hope of ultimately embracing the whole world. In the meantime France is best prepared for the reception of its lessons, and next to France, Italy; then Germany, England, and Spain. These five nations, therefore, are to be represented in a Central Committee, (*Comité Positif occidental*), consisting of *thirty* members, each nation having a number of representatives proportioned to its aptitude for the task: France *eight*, England *seven*, Italy *six*, Germany *five*, and Spain *four*; this committee to sit at first, but not invariably, in Paris, and to constitute "the Permanent Council of the Church Positive for the re-organization of Europe!"

We might have been disposed to smile at this project as the visionary day-dream of a man very learned but not very wise, had we not heard that a Society has actually been instituted at Paris with a view to its realization, and that, under their auspices, M. Comte has recently issued the astounding programme which we now proceed to lay before our readers. The "Positive Calendar," or Almanac, is designed to regulate "*the systematic worship of Humanity*, which has love for its principle, order for its base, and progress for its end." It exhibits a general system of public commemoration similar to that of the festivals and saints' days of the Catholic Church, but destined to supersede them, and to guide the final transition of the great Western Republic on its inevitable passage from theology to Atheism. M. Comte adopts a new division of the year, and makes it to consist of *thirteen* months, each of *four* weeks. The division of time into weeks is preserved, as also the distinctive character of the Sabbath, that, in superseding Catholicism, Positivism may still afford the means of sanctifying active life by a suitable periodic culture of the popular mind and of social sentiment. The systematic worship of humanity, which is declared to be the final and definitive form of religion, is described as being either

concrete or *abstract*: the former celebrates the past, the latter represents the future; *this* being the higher and the ultimate landing-place, but *that* the best adapted to the present circumstances of society. It is a system of hero-worship, in which all the benefactors of mankind are commemorated, in whatever age or clime they may have been born, and whatever creed or worship they may have followed. It is designed to celebrate the series of ancestors, intellectual and social, of the grand western family of man. They are divided into *three* classes, corresponding to gods, heroes, and saints; and one of the first class is made to preside over a month, another, of the second class, over a week, and another, of the third class, over a day. With these explanations we proceed to exhibit a specimen of the Calendar of Infidel Worship, as drawn up for a year by M. Comte:—

First Month,—MOSES and Theocracy.

	First Week.	Second Week.	Third Week.	Fourth Week.
1. Monday,	Prometheus.	Belus.	Fo-HI.	Abraham.
2. Tuesday,	Hercules.	Sesostris.	Lao-Tseu.	Samuel.
3. Wednesday,	Orpheus.	Menou.	Meng-Tseu.	Solomon.
4. Thursday,	Ulysses.	Cyrus.	Theoc. of Thibet.	Isaiah.
5. Friday,	Lycurgus.	Zoroaster.	Theoc. of Japan.	John Baptist.
6. Saturday,	Romulus.	Druids, (Ossian.)	Manco-Capac.	Haroun al Raschid.
7. SABBATH,	NUMA.	BOUDDHA.	CONFUCIUS.	MAHOMET.

Second Month,—HOMER and Ancient Poetry.

	First Week.	Second Week.	Third Week.	Fourth Week.
1. Monday,	Hesiod.	Scopas.	Esop.	Ennius.
2. Tuesday,	Tyrtæus.	Zeuxis.	Aristophanes.	Lucretius.
3. Wednesday,	Anacreon.	Ictinus.	Terence.	Horace.
4. Thursday,	Pindar.	Praxiteles.	Phædrus.	Tibullus.
5. Friday,	Sophocles.	Lysippus.	Juvenal.	Ovid.
6. Saturday,	Theocritus.	Apelles.	Lucian.	Lucan.
7. SABBATH,	ÆSCHYLUS.	PHIDIAS.	PLAUTUS.	VIRGIL.

Sixth Month,—ST. PAUL and Catholicism.

	First Week.	Second Week.	Third Week.	Fourth Week.
1. Monday,	St. Luke.	Constantine.	St. Benedict.	F. Xavier.
2. Tuesday,	St. Cyprian.	Theodosius.	St. Boniface.	C. Borromeo.
3. Wednesday,	St. Athanasius.	St. Chrysostom.	St. Isidore.	St. Theresa.
4. Thursday,	St. Jerome.	St. Pulcheria.	Lanfranc.	Vincent de Paul.
5. Friday,	St. Ambrose.	St. Genevieve.	Heloise.	Bourdaloue.
6. Saturday,	St. Monica.	St. Gregory.	Architects of middle age.	W. Penn.
7. SUNDAY,	ST. AUGUSTIN.	HILDEBRAND.	ST. BERNARD.	BOSSUET.

Eighth Month,—DANTE and the Modern Epopée.

	First Week.	Second Week.	Third Week.	Fourth Week.
1. Monday,	The Troubadours.	L. de Vinci.	Froissart.	Petrarch.
2. Tuesday,	Boccaccio.	Michael Angelo.	Camoens.	T. A. Kempis.
3. Wednesday,	Rabelais.	Holbein.	Span ^h . Romancers.	Mad ^{me} Lafayette.
4. Thursday,	Cervantes.	Poussin.	Chateaubriand.	Fenelon.
5. Friday,	Fontaine.	Murillo.	Walter Scott.	Klopstock.
6. Saturday,	De Foe.	Teniers.	Manzoni.	Byron.
7. SUNDAY,	ARIOSTO.	RAPHAEL.	TASSO.	MILTON.

Thirteenth Month,—BICHAT and Modern Science.

	First Week.	Second Week.	Third Week.	Fourth Week.
1. Monday,	Copernicus.	Vieta.	Bergmann.	Harvey.
2. Tuesday,	Kepler.	Wallis.	Priestley.	Boërhaave.
3. Wednesday,	Huyghens.	Clairaut.	Cavendish.	Linnaeus.
4. Thursday,	Jas. Bernouilli.	Euler.	Guyton Morveau.	Haller.
5. Friday,	Bradley.	D'Alembert.	Berthollet.	Lamarck.
6. Saturday,	Voltaire.	Lagrange.	Berzelius.	Broussais.
7. SABBATH,	GALILEO.	NEWTON.	LAVOISIER.	GALL.

But *jam satis*. It is remarkable, that while the names of Moses, Solomon, Paul, John the Baptist, and John the Evangelist, Justin, Clement, and Origen, are all commemorated in conjunction with those of Bouddha, Confucius, and Mahomet, no mention is made of JESUS CHRIST,—a singular omission in any view which can be taken of it, whether it arise from a latent consciousness of His unparalleled character,—or from a feeling of scepticism, such as is indicated in the only allusion which is made to Him as the real or imaginary founder of Christianity—“*le fondateur réel ou idéal*.” It is also remarkable that he omits those who are conceived to have been mere *destructives*, such as Luther, Calvin, and Rousseau, while Voltaire is admitted, but only as a tragic poet; and further, that the additional day in leap-year is devoted, at least for half an age to come, to the solemn public reprobation of the three great *obstructives* to human progress, Julian, Philip II., and NAPOLEON!

Such is the Positive Pantheon, and such its Calendar of Saints. Infidelity would fain become world-wide, like Popery; and it seeks to assimilate its organization and its rites to that masterpiece of Satan's policy.

- ART. III.—1. *The Personal History and Experience of David Copperfield the Younger.* By CHARLES DICKENS. London, 1850.
2. *The History of Pendennis.* By WILLIAM MAKEPEACE THACKERAY. London, 1850.

THACKERAY and DICKENS, Dickens and Thackeray—the two names now almost necessarily go together. It is some years since Mr. Thackeray, whose reputation as an author had until then, we believe, been of somewhat limited extent, suddenly appeared in the field of literature already so successfully occupied by Mr. Dickens. But the intrusion, if it may be called such, was made with so much talent, and so much applause followed it, that since that time the two have gone on as peers and rivals. From the printing-house of the same publishers they have simultaneously, during the last few years, sent forth their monthly instalments of amusing fiction—Dickens his “*Dombey*” and his “*Copperfield*,” and Thackeray his “*Vanity Fair*” and his “*Pendennis*.” Hence the public has learned to think of them in indissoluble connexion as friendly competitors for the prize of light literature. There is, indeed, a third writer often and worthily named along with them—Mr. Douglas Jerrold. But though, when viewed in the general as humorists and men of inventive talent, the three do form a triad, so that it is hardly possible to discuss the merits of any one of them without referring to the other two, yet, as the characteristic form of Mr. Jerrold’s literary activity has not been specially that of the popular novelist, he is not associated with his two eminent contemporaries so closely, in this denomination, as they are associated with each other. As the popular novelists of the day, Dickens and Thackeray, and again, Thackeray and Dickens, divide the public attention. And as the public has learned thus to think of them together, so also, using its privilege of chatting and pronouncing judgments about whatever interests it, it has learned to set off the merits of the one against those of the other, and to throw as much light into the criticism of each as can be derived from the trick of contrast. One party of readers prefers Dickens, and points out, with an ardour almost polemical, that Thackeray wants such and such qualities which are conspicuous in their favourite; another party wears the Thackeray colours, and contends, with equal pertinacity, that in certain respects Thackeray is the superior writer. Very much the same things, we believe, are said on this subject both by ladies and by gentlemen at all literary parties. Now, though we cannot say that the public has as yet gone very deep in their discriminations between the two favourites, and

though we are of opinion that, with all our grumblings and criticisms, we should be willing to leave both writers to go on in their own way, and only be too glad that we have such a pair of writers to cheer on against each other at all; yet we think that, in this notion of contrast, the public has really got hold of a good thread for a critic to pursue, and we mean, as far as possible, throughout this paper, to avail ourselves of it.

It is admitted that both writers are as well represented in their last as in any of their previous productions. "*Copperfield*," according to the general voice of the critics, is one of the best of Mr. Dickens's stories, written with decidedly more care and effort than its immediate predecessors, as if the author had determined to shew the captious public that his genius was as fine and fresh as ever. And though we have heard "*Pendennis*" described as a mere continuation of "*Vanity Fair*," and no advance upon it in point of excellence, we believe the general opinion to be that Mr. Thackeray has not discredited himself by his recent performance, but has rather increased his popularity. Moreover, no two stories are better calculated to illustrate, in the way of contrast, the characteristic peculiarities of their respective authors. The very spirit and philosophy of all Mr. Dickens's writings is that which we find expressed in the character and life of David Copperfield, so that, did we want to describe that spirit and philosophy in a single term, we should not be far wrong in calling it *Copperfieldism*; and, on the other hand, in no work has Mr. Thackeray exhibited so fully that caustic, thoroughly British, and yet truly original humour, with which he regards the world and its ways, as in his sketch of the Life and Adventures of Mr. Arthur Pendennis. When we say "*Pendennis*" and "*Copperfield*," therefore, it is really the same as if we said Thackeray and Dickens. And this facility of finding the two authors duly contrasted in the two stories, is increased by the fact that the stories are in some respects very similar. In both we have the life and education of a young man related, from his childhood and school-time to that terminus of all novels, the happy marriage-point; in the one, the life and education of the orphan child of a poor gentleman in Suffolk; in the other, the life and education of the only son of a West of England squire, with a long Cornish pedigree. In both, too, the hero becomes a literary man, so that the author, in following him, finds room for allusions to London literary life. There are even some resemblances of a minuter kind, such as the existence in both stories of a mysterious character of the outlaw species, who appears at intervals to ask money and throw the respectable folks of the drama into consternation; from which one might imagine that the authors, during the progress of their narratives, were not ashamed to take

hints from each other. But however that may be, there can be no doubt that the general external similarity that there is between the two stories will serve to throw into relief their essential differences of style and spirit.

These differences are certainly very great. Although following exactly the same literary walk, and both great favourites with the public, there are perhaps no two writers so dissimilar as Mr. Dickens and Mr. Thackeray. To begin with a matter which, though in the order of strict science it comes last, as involving and depending on all the others,—the matter of style or language: here everybody must recognise a remarkable difference between the two authors. If Messrs. Bradbury and Evans would furtively supply us with a page of the manuscript of “*Copperfield*,” together with a corresponding page of the manuscript of “*Pendennis*,” we should probably be able, on comparing the two, and examining the state of their penmanship, to detect some characteristic differences in the habits of composition of the two novelists, and to say which of them is, on the whole, the more careful and trained, and which the more easy and fluent writer. Nay, even without having such an unusual facility afforded to us, we might, by way of a first attempt in the graphiological art, try to infer something or other (and we advise our readers to infer it) from a comparison of the free and somewhat dashing penmanship of Dickens, as exhibited to the public in the printed specimens, with the neat and elegant writing of those stray autographs of Thackeray, which, in exploring the albums of our fair friends, we have occasionally seen. But in such a case we prefer having recourse to a receipt of our own, which we have usually found effectual when we wanted some insight into the mechanism of an author’s style. This receipt, which we impart to the reader on the condition that he make no ungrateful application of it, is that the critic should deliberately copy out with his own hand a suitable paragraph or two from the author whose manner he wishes to study. By this means the critic attaches himself, as it were, to the author in the act of composition, and is able to discover much—not only haste or slovenliness, if there is any; not only superfluous expression, false metaphor, or bad punctuation; but also the tricks of association, the intellectual connexions and minute flights by which the author leaps from thought to thought and from phrase to phrase. We have selected a passage from “*Copperfield*,” and one from “*Pendennis*,” whereon the reader, while enjoying them for their own sake, may, if he chooses, try his ingenuity. That the test may be the fairer the passages selected are as nearly as possible in the same sentimental key.

Glance at a Model Prison.—“It being then just dinner-time, we went, first into the great kitchen, where every prisoner’s dinner was in course

of being set out separately, (to be handed to him in his cell,) with the regularity and precision of clock-work. I said aside, to Traddles, that I wondered whether it occurred to anybody that there was a striking contrast between these plentiful repasts of choice quality, and the dinners, not to say of paupers, but of soldiers, sailors, labourers, the great bulk of the honest working community, of whom not one man in five hundred ever dined half so well. But I learned that the 'system' required high living; and, in short, to dispose of the system, once for all, I found that on that head and on all others, 'the system' put an end to all doubts, and disposed of all anomalies. Nobody appeared to have the least idea that there was any other system, but *the* system, to be considered. As we were going through some of the magnificent passages, I inquired of Mr. Creakle and his friends, what were supposed to be the main advantages of this all-governing and universally over-riding system. I found them to be the perfect isolation of prisoners—so that no one man in confinement there knew anything about another; and the reduction of prisoners to a wholesome state of mind, leading to sincere contrition and repentance. Now, it struck me, when we began to visit individuals in their cells, and to traverse the passages in which those cells were, and to have the manner of going to chapel and so forth, explained to us, that there was a strong probability of the prisoners knowing a good deal about each other, and of their carrying on a pretty complete system of intercourse. This, at the time I write, has been proved, I believe, to be the case; but as it would have been flat blasphemy against the system to have hinted such a doubt then, I looked out for the penitents as diligently as I could. And here again, I had great misgivings. I found as prevalent a fashion in the form of the penitence, as I had left outside in the forms of the coats and waist-coats in the windows of the tailors' shops. I found a vast amount of profession, varying very little in character: varying very little (which I thought exceedingly suspicious) even in words. I found a great many foxes, disparaging whole vineyards of inaccessible grapes; but I found very few foxes whom I would have trusted within reach of a bunch. Above all, I found that the most professing men were the greatest objects of interest; and that their conceit, their vanity, their want of excitement, and their love of deception, (which many of them possessed to an almost incredible extent, as their histories shewed,) all prompted to these professions, and were all gratified by them."—*Copperfield*, pp. 603, 604.

Glance at an Inn of Court.—"If we could but get the history of a single day as it is passed in any one of those four-storied houses in the dingy court where our friends Pen and Warrington dwelt, some Temple Asmodeus might furnish us with a queer volume. There may be a grave Parliamentary counsel on the ground-floor, who drives off to Belgravia at dinner-time, when his clerk, too, becomes a gentleman, and goes away to entertain his friends and to take his pleasure. But a short time since he was hungry and briefless in some garret of the Inn; lived by stealthy literature; hoped, and waited, and sickened, and no clients came; exhausted his own means and his friends' kind-

ness; had to remonstrate humbly with duns, and to implore the patience of poor creditors. Ruin seemed to be staring him in the face, when, behold a turn of the wheel of fortune, and the lucky wretch in possession of one of those prodigious prizes which are sometimes drawn in the great lottery of the Bar. Many a better lawyer than himself does not make a fifth part of the income of his clerk, who, a few months since, could scarcely get credit for blacking for his master's unpaid boots. On the first floor, perhaps, you will have a venerable man whose name is famous, who has lived for half a century in the Inn, whose brains are full of books, and whose shelves are stored with classical and legal lore. He has lived alone all these fifty years, alone and for himself, amassing learning, and compiling a fortune. He comes home now at night from the Club, where he has been dining freely, to the lonely chambers where he lives a godless old recluse. When he dies, his Inn will erect a tablet to his honour, and his heirs burn a part of his library. Would you like to have such a prospect for your old age, to store up learning and money, and end so? But we must not linger too long by Mr. Doomsday's door. Worthy Mr. Grump lives over him, who is also an ancient inhabitant of the Inn, and who, when Doomsday comes home to read Catullus, is sitting down with three steady seniors of his standing, to a steady rubber at whist, after a dinner at which they have consumed their three steady bottles of Port. You may see the old boys asleep at the Temple Church of a Sunday. Attorneys seldom trouble them, and they have small fortunes of their own. On the other side of the third landing, where Pen and Warrington live, till long after midnight sits Mr. Paley, who took the highest honours, and who is a fellow of his College; who will sit and read and note cases until two o'clock in the morning; who will rise at seven, and be at the pleader's chambers as soon as they are open, where he will work until an hour before dinner-time; who will come home from the Hall and read and note cases again until dawn next day, when perhaps Mr. Arthur Pendennis and his friend Mr. Warrington are returning from some of their wild expeditions. How differently employed Mr. Paley has been! He has not been throwing himself away: he has only been bringing a great intellect laboriously down to the comprehension of a mean subject, and, in his fierce grasp of that, resolutely excluding from his mind all higher thoughts, all the wisdom of philosophers and historians, all the thoughts of poets; all wit, fancy, reflection, art, love, truth altogether—so that he may master that enormous legend of the law, which he purposes to gain his livelihood by expounding.”—*Pendennis*, vol. i. pp. 290-292.

Now, after transcribing these two extracts, we must say that our impression of the difference between the two authors in the matter of style is very much what it has always been from a general reading acquaintance with their works; namely, that Mr. Thackeray is the more terse and idiomatic, and Mr. Dickens the more diffuse and luxuriant writer. Both seem to

be easy penmen, and to have language very readily at their command; both also seem to convey their meaning as simply as they can, and to be careful, according to their notions of verbal accuracy; but in Mr. Dickens's sentences there is a leafiness, a tendency to words and images, for their own sake; whereas in Mr. Thackeray's one sees the stem and outline of the thought better. We have no great respect for that canon of style which demands in English writers the use of Saxon in preference to Latin words, thinking that a rule to which there are natural limitations, variable with the writer's aim and with the subject he treats; but we should suppose that critics who do regard the rule would find Mr. Thackeray's style the more accordant with it. On the whole, if we had to choose passages at random, to be set before young scholars as examples of easy and vigorous English composition, we would take them rather from Thackeray than from Dickens. There is a Horatian strictness, a racy strength, in Mr. Thackeray's expressions, even in his more level and tame passages, which we miss in the corresponding passages in Mr. Dickens's writings, and in which we seem to recognise the effect of those classical studies through which an accurate and determinate, though somewhat bald, use of words becomes a fixed habit. In the ease, and, at the same time, thorough polish and propriety with which Mr. Thackeray can use slang words, we seem especially to detect the University man. Snob, swell, buck, gent, fellow, foggy—these, and many more such expressive appellatives, not yet sanctioned by the Dictionary, Mr. Thackeray employs more frequently, we believe, than any other living writer, and yet always with unexceptionable taste. In so doing he is conscious, no doubt, of the same kind of security that permits Oxford and Cambridge men, and even, as we can testify, Oxford and Cambridge clergymen, to season their conversation with similar words—namely, the evident air of educated manliness with which they can be introduced, and which, however rough the guise, no one can mistake. In the use of the words genteel, vulgar, female, and the like—words which men diffident of their own breeding are observed not to risk; as well as in the art of alternating gracefully between the noun lady and the noun woman, the Scylla and Charybdis, if we may so say, of shy talkers—Mr. Thackeray is also a perfect master, commanding his language in such cases with an unconscious ease, not unlike that which enables the true English gentleman he is so fond of portraying, either to name titled personages of his acquaintance without seeming a tuft-hunter, or to refrain from naming them without the affectation of Radicalism. In Mr. Dickens, of course, we have the same perfect taste and propriety; but in him the result appears to arise, if we may so express ourselves, rather from the

keen and feminine sensibility of a fine genius, whose instinct is always for the pure and beautiful, than from the self-possession of a mind correct under any circumstances, by discipline and sure habit. Where Mr. Dickens is not exerting himself, that is, in passages of mere equable narrative or description, where there is nothing to move or excite him, his style, as we have already said, seems to us more careless and languid than that of Mr. Thackeray; sometimes, indeed, a whole page is only redeemed from weakness by those little touches of wit and those humorous turns of conception which he knows so well how to sprinkle over it. It is due to Mr. Dickens to state, however, that in this respect his "*Copperfield*" is one of his most pleasing productions, and a decided improvement on its predecessor "*Dombey*." Not only is the spirit of the book more gentle and mellow, but the style is more continuous and careful, with fewer of those recurring tricks of expression, the dead remnants of former felicities, which constituted what was called his mannerism. Nor must we omit to remark also, that in passages where higher feeling is called into play, Mr. Dickens's style always rises into greater purity and vigour, the weakness and the superfluity disappearing before the concentrating force of passion, and the language often pouring itself forth in a clear and flowing song. This, in fact, is according to the nature of the luxuriant or poetical genius, which never expresses itself in its best or most concise manner unless the mood be high as well as the meaning clear;—for maintaining the excellence of the style of a terse and highly reflective writer, such as Thackeray, on the other hand, the presence of a clear meaning is at all times sufficient, though, of course, here also the pitch and melody will depend on the mood.

But it would be unfair to our courteous publisher, as well as to the reader, if we had quoted the foregoing extracts only as samples of the style and manner of our two novelists. We believe also, that they will suggest, or at least illustrate, certain more prominent and tangible differences between them.

Regarding the general intellectual calibre, for example, of the two men, viewing that as far as possible without reference to their special function as artistic writers, we should say that the passages we have quoted represent pretty fairly their average powers of thought; their competence, either by native faculty or acquired culture, to deal intellectually with any subject that might be submitted to them. Now, here again, our impression is, that Thackeray's is the mind of closer and more compact, Dickens's the mind of looser, richer, and freer texture. In the passage we have quoted from Thackeray there is certainly no positive or express display either of thought or of learning, and we would by no

means cite it as a specimen of what he could do in the way either of speculation or of erudite allusion ; still there is about it a knowingness, an air of general ability and scholarship, that suggests that the man who wrote it could take an influential place, if he chose, either in an assembly of critics, or in a committee of men of business. There is a general force of talent, a worldly shrewdness and sagacity, as well as a certain breadth of culture, latent in it, from which we argue that the writer would in any company make himself felt, if not as a man of energetic activity, at least as a man of quiet brain and vigour. Mr. Dickens, too, is of course a man whose intellect would be remarkable anywhere ; for no writer could rise to his degree of excellence in any department without much of that general force and fulness of mind which would have enabled him to excel in any other ; perhaps, also, his natural versatility is greater than that of Mr. Thackeray ; still we do not see in him that habitual knowingness, that close-grained solidity of view, that impressive strong sense, which we find in what Thackeray writes. Mr. Dickens may be the more pensive and meditative, but Mr. Thackeray is the more penetrating and reflective writer. The contrast between them in this respect is not unlike that which might, though at the risk of confusion, be drawn between some of the best recent novelists of France and their contemporary Balzac. Like Balzac, Thackeray strikes us by his shrewd, hard, and all but remorseless insight, thus creating the impression that in the matter of general sagacity, the mere *lumen siccum* which all men need, he must be superior to many who could still rival him as artists. Dickens, we should suppose, would be more apt to fall into commonplace than Thackeray ; indeed, in the passage on model prisons which we have quoted from "Copperfield," and which, as it is an important passage, and controversial in its tone, may be regarded as a fair average specimen of Mr. Dickens's habits as a thinker, it is only the soundness of the conclusion, and the evident sincerity of the feeling, that redeem the writing from a dangerous resemblance to common talk. Neither, on the one hand, does Mr. Dickens deepen and elaborate his thoughts by special effort, which might be deemed unsuitable in a novel ; nor, on the other hand, do all his thoughts on their first expression, carry with them that air of native weight which would belong, we imagine, to the opinions of Thackeray. A writer of Mr. Dickens's celebrity ought not to devote a whole page to the repetition of what everybody says, in very nearly the same words that everybody uses. He ought, by giving his own reasons as profoundly as possible, to elevate and strengthen the common opinion. Here, of course, however, the same remark is of force that we applied to the matter of Mr. Dickens's style. As Mr. Dickens's language, though loose

and redundant in the tame and level passages, gathers itself up and acquires concentration and melody under the influence of passion or pathos, so his thought, ordinarily lax and unwrought, attains real pith and volume when his feelings are moved. For this, we repeat, is the prerogative of an essentially susceptible and poetic nature, that every part and faculty of it, judgment as well as fancy, does its best when the frenzy is upon it. As a man, therefore, more capable of the poetic excitement than the majority of his literary contemporaries, Mr. Dickens might occasionally, we think, strike into a *quæstio vexata* with peculiar effect, and render to the public a positive intellectual service. Still, our impression is, that as regards the possession and habitual practice of a cool, masculine, and decisive judgment, Thackeray's writings shew him to be a man more competent to exert an influence on current affairs. Dickens, when enthusiasm did call upon him to interfere, would act more resistlessly; but Thackeray would be the man of more sound and steady intelligence.

Yet, curiously enough, the two writers seem, in this respect, to have exchanged their parts. Dickens is by far the more opinionative and aggressive, Thackeray by far the more acquiescent and unpolemical, writer. The passage on model prisons quoted above, wherein Mr. Dickens attacks the silent system of prison management, is but one instance out of hundreds in which he has, while pursuing his occupation as a novelist, pronounced strong judgments on disputed social questions. To whatever cause the fact is to be attributed—whether to a native combativeness conjoined with great benevolence of disposition, or to external circumstances that have developed in him the habit of taking a side in all current controversies—we should say, without hesitation, that few men, dominated so decidedly by the artistic temperament, have shewn so obvious an inclination as Mr. Dickens to step beyond the province of the artist, and exercise the functions of the social and moral critic. It was a law of Solon, that no Athenian should stand neutral at a time when any great question agitated the state;—whosoever did not come to the poll, give his vote like a man, and take his due part in the public business, was to be punished with death as a useless and immoral fellow. There was a profound sense in this law; and Mr. Dickens seems but to appreciate it, and to act up to his duty as an English citizen, when, by means of pamphlets, public speeches, letters to the newspapers, articles in periodicals, and other such established methods of communicating with his fellow-subjects, he speaks his mind freely on practices or institutions that offend him. It ought, indeed, to be a matter for congratulation, when such a man comes forward to give a practical opinion at all; he ought to be listened to with special deference,

and his suggestions ought to be carefully considered. Nor is it a secret that Mr. Dickens, following the dictates of a warm and generous heart, has rendered, on various occasions, very zealous and important services to the cause of public morality and benevolence. Recently, indeed, his shrewd observation and brilliant powers of writing, have been employed from week to week in the express task of exposing certain anomalies and abuses in our social arrangements, lying, as it would seem, quite snugly out of sight of official vigilance. In all this he merits only encouragement and success. We cannot, however, assent so easily to his habit of interspersing controversial remarks, and direct passages of social criticism and remonstrance, through his fictions. Clearly as these works belong to the department of artistic writing, there is not one of them that does not contain matter that is purely dogmatic in its import—judgments pronounced promptly and peremptorily by Mr. Dickens in his own name on various questions of morals, taste, or legislation. Prison-discipline, the constitution of the ecclesiastical courts, the management of schools, capital punishments; Mr. Dickens's opinions on these, and many other such topics of a practical kind, are to be found explicitly affirmed and argued in his novels. Nor is he content with expressing his views merely on practical points. Modes of thinking, doctrines, theological and speculative tendencies, likewise come in for a share of his critical notice. Passages might be quoted from his stories, for example, where he has distinctly attacked and denounced transcendentalism in philosophy, and puritanism in religion. Now, of course, a man must have his views on these subjects, and these views must break out in his works, however artistic their form; but it is a dangerous thing thus openly and professedly to blend the functions of the artist with those of the declaimer. A man who does so must needs be very sure of himself, and must have his own beliefs elaborated as a whole into their most complete and living form of combination. For, as we have before said, when a man like Dickens dogmatizes, one is entitled to expect something that shall, both in reason and in expression, have a finish and beauty beyond the art of the mere platform speaker. Every thought should then be conceived under the extreme pressure of a wish to say all in little space; and every word should sparkle like a well-set jewel. For our respect for the talent a man shews as an artist, ought not, as a matter of course, to extend itself so as to shelter all his dicta as a moralist or practical politician. It may be requisite to adjust our relations to him differently, according as he talks to us in the one capacity or in the other. We may owe one degree of respect for Mr. Dickens as the describer of Squeers and Creakle, and quite

another degree of respect when he tells us how he would have boys educated. Mr. Spenlow may be a capital likeness of a Doctors' Commons lawyer; and yet this would not be the proper ground for concluding Mr. Dickens's view of a reform in the ecclesiastical courts to be right. No man has given more picturesque illustrations of criminal life in London than Mr. Dickens; yet he might not be equally trustworthy in his notions of prison-discipline. His Dennis the hangman in "Barnaby Rudge" is a powerfully conceived character; yet this is no reason for accepting his opinion on capital punishments. In short, the arguments and opinions of an artist must stand on their own merits, with this additional proviso that, for permitting an artist to argue at all, we require him to argue right-royally, like an Apollo in the robe of a barrister. True, very many of Mr. Dickens's judgments on practical matters are sound and excellent—some of those we have alluded to in the number; on some points, however, and especially in those higher regions of speculative doctrine into which we have said that Mr. Dickens has not seldom ventured, we believe his sentiments to be defective. We shall have, probably, to revert to this consideration before we conclude the present paper.

Mr. Thackeray, though more competent, according to our view of him, to appear in the character of a general critic or essayist, seems far more of a *pococurante* than Mr. Dickens. Whether it is that he is naturally disposed to take the world as he finds it, or that, having at some time or other had very unsatisfactory experience of the trade of trying to mend it, he has taken up *pococurantism* as a theory, we have no means of saying; but certain it is, that in the writings he has given forth since he became known as one of our most distinguished literary men, he has meddled far less with the external arrangements of society than Mr. Dickens, and made far fewer appearances as a controversialist or reformer. An exception might, indeed, be taken to this remark with reference to certain essays in *Punch*, and particularly certain recent satirical sketches there of Jesuits and Jesuitism, which bear the stamp of Thackeray's manner. But generally, and even with regard to these particular papers, it will be found that it is not of the social arrangements and conventions amid which men and women move, so much as of men and women themselves, that Mr. Thackeray is the satirist. The foibles and vices of individual human beings; the ugly things that are transacted and the commotions that go on in that little world, twenty-three inches or thereby in circumference, which each man carries under his own hat—these, and not the storms and discussions of the big world without, are the stuff out of which Mr. Thackeray weaves his fictions. His care is not about

the conditions, political or social, to which this conceited young dandy, that old debauchee, that sentimental little minx, and all the rest of us, must submit during our little bit of life; what he delights to do is to follow these various personages as they get on amid these conditions—to watch, with an interest half humorous, half sad, the dandy as he struts along Pall Mall; to trace the old wretch to his haunts; to detect the young minx boxing her brother's ears in private. And here, certainly, he is fierce and pitiless enough. What he likes in men and women, what he hates, what he will tolerate, and what moves his indignation and contempt, are indicated with too great clearness to be mistaken. But he does not carry his polemics into the field of exterior circumstances. The "snob," as such, is his quarry, and as he hovers aloft on the watch for him, it matters nothing whether he descries him in Crim Tartary or in England—on this side or on that side of any political frontier; the snob, and not his environment, is the object of his attention; hawk-like he gives chase and pins the victim. "Let us cease to be snobs; till then, whether we are in Crim Tartary or in England, whether we have liberal institutions or live under a despot, is of very secondary consequence;" such is virtually the rule according to which he writes. How in his more private and unprofessional character he may think it right to act; whether or not he would make a busy vestryman if elected, or whether he regards all partizanship in public politics as a mere Hoolan and Doolan affair, to be left to the editors of newspapers, we have no means of knowing; the impression made by his writings, however, is that, in these matters, like many more of our best men, he is far gone in a kind of grim, courteous pococurantism.

To pass, however, to the consideration of what is after all the most conspicuous difference between the two novelists, namely, the essential difference between their styles of literary art, their peculiar faculties and tastes as descriptive and imaginative writers. Here it will assist us very much in our discriminations if we call to mind, by way of illustration, the leading distinctions of style and faculty in the kindred art of painting.

One evident source or reason of distinction, then, in the art of painting, is the outwardly-fixed variety of those objects which it may be the aim of the painter to seize. From this source arises first of all, the theoretical distinction of painters into two great classes—landscape-painters and figure-painters. The former, speaking generally, are those who seek to represent scenes of inanimate nature; portions, larger or smaller, of all that varied glory of form and colour that lies between the concave of sky and cloud above, and the plane of earth and sea beneath. The objects of the figure painter, on the other hand, are beings en-

dowed with life, either singly or in groups. Though, of course, the distinction is strict only in theory—the landscape-painter introducing figures into his pictures, and the figure-painter requiring backgrounds for his—yet it holds to a certain extent also in practice; and we hear of painters who are said to be good in their figures, but poor in their backgrounds, and of others of whom the reverse complaint is made. And, subordinate to this leading distinction are a number of others. Thus, under the designation of landscape-painters, using that term in its utmost generality, may be included such classes as these—landscape-painters proper, who represent portions of the earth's surface, whether in calm or rugged aspects; painters of sea-pieces; tree-painters; painters of street-scenes and city-vistas; painters of the interiors of edifices, both noble and humble; flower-painters; fruit-painters; and the like. By a similar license, the term figure-painters may be supposed to include such classes as these—cattle-painters; historical painters; portrait-painters; painters of scenes of village or town life; painters of imaginary actions; allegorical or symbolical painters; and so forth. Certain of these classes, as, for example, the landscape-painters proper, the historical painters, the allegorical painters, and the painters of imaginary actions, rank as higher in kind than the others; the greatest painters have been great both in figure and in landscape; and perhaps the most interesting paintings are those wherein the two are duly combined, one or the other predominating.

But, independent of these outwardly-determined distinctions, and helping greatly to complicate them, are others, having their origin not in the outer variety of nature, but in the spirit and form of thought of the painter. Taking rise in this source, for instance, is the important distinction between what may be called the Real, and what may be called the Ideal, (we beg Mr. Thackeray's pardon for the use of these two words, which we do not like any more than he, and would avoid if we could,) style or theory of art. In the real style of art, the aim is to produce pictures that shall impress by their close and truthful resemblance to something or other in real nature or life. It would be false to say that there may not be a genuine exercise of the poetic or imaginative faculty in this walk of art. Even in the humblest specimen of imitative painting, if it is to rise at all above the character of a mere copy, the artist must contribute some special conception or intention of his own, according to which the objects may be arranged, and which shall give them their effect as a whole. Still, in the higher sense in which the word imagination is often used, as implying a rarer exercise of inventive power, it cannot be said that the real style of painting is so imaginative as that which we have called the ideal. In this style of art the

conception or intention supplied by the painter bears a larger proportion to the matter outwardly given than in the other. A picture executed in this style strikes, not by recalling real scenes and occurrences, but by taking the mind out of itself into a region of higher possibilities, wherein objects shall be more glorious, and modes of action more transcendent, than any we see, and yet all shall seem in nature. When the aspiration of the artist in this style is greater than his powers of harmonious conception, the result is the extravagant or the unnatural; perfect art is attained only when the objects as represented are elevated above objects as they appear, precisely to that degree in which a world constructed expressly in the mood of the artist's intention might be expected to exceed the common world. It is observed, too, that artists who favour the ideal theory, usually work in the more ambitious departments of landscape or figure painting; and hence probably it is that the real style is sometimes, though perhaps not very happily, called *Low Art*, and the ideal style, *High Art*.

All this may be transferred with ease to the occupation of the literary artist, or writer of fiction. Thus, applying it to the particular case in view, it may be said, in the first place, with respect to our two novelists, that the artistic faculty of Dickens is more comprehensive, goes over a wider range of the whole field of art, than that of Thackeray. Take Dickens, for example, in the landscape or background department. Here he is capable of great variety. He can give you a landscape proper—a piece of the rural English earth in its summer or in its winter dress, with a bit of water, and a pretty village spire, in it; he can give you, what painters seldom attempt, a great patch of flat country by night, with the red trail of a railway train traversing the darkness; he can even succeed in a sea-piece; he can describe the crowded quarter of a city, or the main street of a country town, by night or by day; he can paint a garden, sketch the interior of a cathedral, or daguerreotype the interior of a hut or drawing-room with equal ease; he can even be minute in his delineations of single articles of dress or furniture. Take him, again, in the figure department. Here he can be an animal-painter with Landseer when he likes, as witness his dogs, ponies, and ravens; he can be a historical painter, as witness his description of the Gordon riots; he can be a portrait-painter or a caricaturist like Leech; he can give you a bit of village or country life, like Wilkie; he can paint a haggard or squalid scene of low city-life, so as to remind one of some of the Dutch artists, Rembrandt included, or a pleasant family-scene, gay or sentimental, reminding one of Maclise or Frank Stone; he can body forth romantic conceptions of terror or beauty, that have risen in his own imagination; he can com-

pose a fantastic fairy piece ; he can even succeed in a powerful dream or allegory, where the figures are hardly human. The range of Thackeray, on the other hand, is more restricted. In the landscape department he can give you a quiet little bit of background, such as a park, a clump of trees, or the vicinity of a country-house, with a village seen in the sunset ; a London street, also, by night or by day, is familiar to his eye ; but, upon the whole, his scenes are laid in those more habitual places of resort, where the business or pleasure of aristocratic or middle-class society goes on—a pillared club-house in Pall Mall, the box or pit of a theatre, a brilliant *salon* in Mayfair, a public dancing-room, a newspaper office, a shop in Paternoster Row, the deck of a steamer, the interior of a married man's house, or a bachelor's chambers in the Temple. And his choice of subjects from the life corresponds with this. Men and women as they are, and as they behave daily, especially in the charmed circles of rank, literature, and fashion, are the subjects of Mr. Thackeray's pencil ; and in his delineations of them he seems to unite the strong and fierce characteristics of Hogarth, with a touch both of Wilkie and Maclise, and not a little of that regular grace and fine sense of colour which charm us in the groups of Watteau.

Fully to compare the powers of description of the two writers, so as to see which is the more thorough and excellent artist in that to which his art extends, it would be necessary to compare descriptive passages from their writings, in which both have attempted the same or nearly the same thing—to compare, for example, a *salon* scene, or a tavern scene of Dickens, with a corresponding scene of Thackeray. We prefer, however, illustrating still farther the difference of their range as artists, by quoting a passage from each, suggesting, by extreme contrast, how far the range of the one in picture exceeds the range of the other. Here is a passage from Dickens of almost savage power and grandeur.

A storm on the east coast.—" ' Don't you think that,' I asked the coachman, in the first stage out of London, ' a very remarkable sky ? I don't remember to have seen one like it.'—' Nor I—not equal to it,' he replied. ' That's wind, sir. There'll be mischief done at sea, I expect, before long.'

" It was a murky confusion—here and there blotted with a colour like the colour of smoke from damp fuel—of flying clouds, tossed up into most remarkable heaps, suggesting greater heights in the clouds than there were depths below them to the bottom of the deepest hollows in the earth, through which the wild moon seemed to plunge headlong, as if, in a dread disturbance of the laws of nature, she had lost her way and were frightened. There had been a wind all day ; and it was rising then, with an extraordinary great sound. In another hour

it had much increased, and the sky was more overcast, and it blew hard.

“But, as the night advanced, the clouds closing in and densely overspreading the whole sky, then very dark, it came on to blow, harder and harder. It still increased, until our horses could scarcely face the wind. Many times in the dark part of the night, (it was then late in September, when the nights were not short,) the leaders turned about, or came to a dead stop; and we were often in serious apprehension that the coach would be blown over. Sweeping gusts of rain came up before the storm, like showers of steel; and, at those times, when there was any shelter of trees or lee walls to be got, we were fain to stop, in a sheer impossibility of continuing the struggle.

“When the day broke, it blew harder and harder. I had been in Yarmouth when the seamen said it blew great guns, but I had never known the like of this, or anything approaching to it. We came to Norwich—very late, having had to fight every inch of ground since we were ten miles out of London; and found a cluster of people in the market-place, who had risen from their beds in the night, fearful of falling chimneys. Some of these, congregating about the inn-yard while we changed horses, told us of great sheets of lead having been ripped off a high church-tower, and flung into a bye-street, which they then blocked up. Others had to tell of country-people, coming in from neighbouring villages, who had seen great trees lying torn out of the earth, and whole ricks scattered about the roads and fields. Still there was no abatement in the storm, but it blew harder.

“As we struggled on, nearer and nearer to the sea, from which this mighty wind was blowing dead on shore, its force became more and more terrific. Long before we saw the sea, its spray was upon our lips, and showered salt rain upon us. The water was out over miles and miles of the flat country adjacent to Yarmouth; and every sheet and puddle lashed its banks, and had its stress of little breakers setting heavily towards us. When we came within sight of the sea, the waves on the horizon, caught at intervals above the rolling abyss, were like glimpses of another shore with towers and buildings. When at last we got into the town, the people came out to their doors, all aslant, and with streaming hair, making a wonder of the mail that had come through such a night.

“I put up at the old inn, and went down to look at the sea; staggering along the street, which was strewn with sand and sea-weed, and with flying blotches of sea-foam; afraid of falling slates and tiles; and holding by people I met, at angry corners. Coming near the beach, I saw, not only the boatmen, but half the people of the town, lurking behind buildings; some, now and then braving the fury of the storm to look away to sea, and blown sheer out of their course in trying to get zigzag back.

“Joining these groups, I found bewailing women whose husbands were away in herring or oyster boats, which there was too much reason to think might have foundered before they could run in anywhere for safety. Grizzled old sailors were among the people, shaking

their heads, as they looked from water to sky, and muttering to one another ; ship-owners, excited and uneasy ; children, huddling together, and peering into older faces ; even stout mariners, disturbed and anxious, levelling their glasses at the sea from behind places of shelter, as if they were surveying an enemy.

“ The tremendous sea itself, when I could find sufficient pause to look at it, in the agitation of the blinding wind, the flying stones and sand, and the awful noise, confounded me. As the high watery walls came rolling in, and, at their highest, tumbled into surf, they looked as if the least would engulf the town. As the receding wave swept back with a hoarse roar, it seemed to scoop out deep caves in the beach, as if its purpose were to undermine the earth. When some white-headed billows thundered on, and dashed themselves to pieces before they reached the land, every fragment of the late whole seemed possessed by the full might of its wrath, rushing to be gathered to the composition of another monster. Undulating hills were changed into valleys, undulating valleys (with a solitary storm-bird sometimes skimming through them) were lifted up to hills ; masses of water shivered and shook the beach with a booming sound ; every shape tumultuously rolled on, as soon as made, to change its shape and place, and beat another shape and place away ; the ideal shore on the horizon, with its towers and buildings, rose and fell ; the clouds flew fast and thick : I seemed to see a rending and upheaving of all nature.”—*Copperfield*, pp. 558, 559.

Now, certainly, there is nothing in all Thackeray that can be compared ; in its kind, with this noble piece of verbal description, which we admire the more now that, in copying it out, we have seen how true the words are to the reality they depict, and how natural and solemn is the cadence. On the other hand, we dare say there are not a few passages in Dickens that could with perfect justice be compared, for clearness and finish, with the following passage from Thackeray, the elegance and French taste of which remind us of Balzac :—

A Mansion in Grosvenor Place.—“ Pen and his uncle declined the refecton, but they admired the dining-room with fitting compliments, and pronounced it ‘very chaste,’ that being the proper phrase. There were, indeed, high-backed Dutch chairs of the seventeenth century ; there was a sculptured carved buffet of the sixteenth ; there was a side-board robbed out of the carved work of a church in the Low Countries, and a large brass cathedral lamp over the round oak table ; there were old family portraits from Wardour Street and tapestry from France, bits of armour, double-handed swords and battle-axes made of *carton-pierre*, looking-glasses, statuettes of saints, and Dresden china—nothing, in a word, could be chaster. Behind the dining-room was the library, fitted with busts and books all of a size, and wonderful easy-chairs, and solemn bronzes in the severe classic style.

“ But what could equal the chaste splendour of the drawing-rooms ? The carpets were so magnificently fluffy that your foot made no more noise on them than your shadow : on their white ground bloomed roses and tulips as big as warming-pans : about the room were high chairs and low chairs, bandy-legged chairs, chairs so attenuated that it was a wonder any but a sylph could sit upon them, marqueterie-tables covered with marvellous gimcracks, china ornaments of all ages and countries, bronzes, gilt daggers, Books of Beauty, yataghans, Turkish papooshes, and boxes of Parisian bonbons. Wherever you sat down there were Dresden shepherds and shepherdesses convenient at your elbow ; there were, moreover, light blue poodles and ducks and cocks and hens in porcelain ; there were nymphs by Boucher, and shepherdesses by Greuze, very chaste indeed ; there were muslin curtains and brocade curtains, gilt cages with parroquets and love-birds, two squealing cockatoos, each out-squealing and out-chattering the other ; a clock singing tunes on a console-table, and another booming the hours like Great Tom, on the mantel-piece—there was, in a word, everything that comfort could desire, and the most elegant taste devise. A London drawing-room, fitted up without regard to expense, is surely one of the noblest and most curious sights of the present day.”—*Pendennis*, vol. i. pp. 371, 372.

On the whole it may be said that, while there are few things that Mr. Thackeray can do in the way of description which Mr. Dickens could not also do, there is a large region of objects and appearances familiar to the artistic activity of Mr. Dickens, where Mr. Thackeray would not find himself at home. And as Mr. Dickens's artistic range is thus wider than that of Mr. Thackeray, so also his style of art is the more elevated. Thackeray is essentially an artist of the real school ; he belongs to what, in painting, would be called the school of low art. All that he portrays—scenes as well as characters—is within the limits, and rigidly true to the features, of real existence. In this lies his particular merit ; and, like Wilkie, he would probably fail, if, hankering after a reputation in high art, he were to prove untrue to his special faculty as a delineator of actual life. Dickens, on the other hand, works more in the ideal. It is nonsense to say of his characters generally, intending the observation for praise, that they are life-like. They are nothing of the kind. Not only are his serious or tragic creations—his Old Humphreys, his Maypole Hughs, his little Nells, &c.—persons of romance ; but even his comic or satiric portraitures do not come within the strict bounds of the real. There never was a real Mr. Pickwick, a real Sam Weller, a real Mrs. Nickleby, a real Quilp, a real Micawber, a real Uriah Heep, or a real Toots, in the same accurate sense that there has been or might be a real Major Pendennis, a real Captain Costigan, a real Becky, a real Sir Pitt Crawley, and a real Mr. Foker. Nature may, indeed, have

furnished hints of Wellers and Pickwicks, may have scattered the germs or indications of such odd fishes abroad; and, having once added such characters to our gallery of fictitious portraits, we cannot move a step in actual life without stumbling upon individuals to whom they will apply most aptly as nicknames—good-humoured bald-headed old gentlemen, who remind us of Pickwick; careless, easy spendthrifts of the Micawber type; fawning rascals of the Heep species; or bashful young gentlemen like Toots. But, at most, those characters are real only thus far, that they are transcendental renderings of certain hints furnished by nature. Seizing the notion of some oddity as seen in the real world, Mr. Dickens has run away with it into a kind of outer or ideal region, there to play with it and work it out at leisure as extravagantly as he might choose, without the least impediment from any facts except those of his own story. One result of this method is, that his characters do not present the mixture of good and bad in the same proportions as we find in nature. Some of his characters are thoroughly and ideally perfect; others are thoroughly and ideally detestable; and even in those where he has intended a mingled impression, vice and virtue are blended in a purely ideal manner. It is different with Mr. Thackeray. The last words of his “Pendennis” are a petition for the charity of his readers in behalf of the principal personage of the story, on the ground that not having meant to represent him as a hero, but “only as a man and a brother,” he has exposed his foibles rather too freely. So, also, in almost all his other characters his study seems to be to give the good and the bad together, in very nearly the same proportions that the cunning apothecary, Nature herself, uses. Now, while, according to Mr. Thackeray’s style of art, this is perfectly proper, it does not follow that Mr. Dickens’s method is wrong. The characters of Shakespeare are not, in any common sense, life-like. They are not portraits of existing men and women, though doubtless there are splendid specimens even of this kind of art among them; they are grand hyperbolic beings created by the breath of the poet himself out of hints taken from all that is most sublime in nature; they are humanity caught, as it were, and kept permanent in its highest and extremest mood, nay carried forth and compelled to think, speak, and act in conditions superior to that mood. As in Greek tragedy, the character that an artist of the higher or poetical school is expected to bring before us, is not, and never was meant to be, a puny “man and brother,” resembling ourselves in his virtues and his foibles, but an ancestor and a demigod, large, superb, and unapproachable. Art is called Art, says Goethe, precisely because it is *not* Nature; and even such a department of art as the modern novel is entitled to the benefit of this maxim.

While, therefore, in Mr. Thackeray's style of delineation, the just ground of praise is, as he claims it to be, the verisimilitude of the fictions, it would be no fair ground of blame against Mr. Dickens, in *his* style of delineation, to say that his fictions are hyperbolic. A truer accusation against him, in this respect, would be that, in the exercise of the right of hyperbole, he does not always preserve harmony; that, in his romantic creations, he sometimes falls into the extravagant, and, in his comic creations, sometimes into the grotesque.

But, while Mr. Dickens is both more extensive in the range, and more poetic in the style of his art than Mr. Thackeray, the latter is, perhaps, within his own range and in his own style, the more careful artist. His stroke is truer and surer, and his attention to finish greater. This may be, in part, owing to the fact that Mr. Thackeray can handle the pencil as well as the pen. Being the illustrator of his own works, and accustomed, therefore, to reduce his fancies to visible form and outline, he attains, in the result, greater clearness and precision, than one who works only in language, or who has to get his fancies made visible to himself by the pencil of another. Apart, however, from the real talent with which Mr. Thackeray illustrates his pages, it may be cited as a proof of the distinctness with which he conceives what he writes, that the names of his characters are almost always excellent. Mr. Dickens has always been thought particularly happy in this respect; we are not sure, however, that Mr. Thackeray does not sometimes surpass him. Dr. Slo-cum, Miss Mactoddy, the Scotch surgeon Glowry, Jeames the footman—these and such-like names, which Mr. Thackeray seems to throw off with such ease, that he lavishes them even on his incidental and minor characters—are, in themselves, positive bits of humour.

It is by the originality and interest of its characters that a novel is chiefly judged. And certainly it is a high privilege, that which the novelist possesses, of calling into existence new imaginary beings; of adding, as it were, to that population of aerial men and women, the offspring of past genius, which hovers over the heads of the actual population of the world. Into this respectable company of invisibles, the eldest and most august members of which are the Achilleses, the Theseuses, the Helens, and the Œdipuses of ancient mythus; the middle-aged and now most influential members of which are the Hamlets, the Falstaffs, the Panurges, the Fausts, and the Manfreds of later European invention; and the youngest and least serious members of which (the Scotch element here predominating) are the Meg Mer-rilieses, the Nicol Jarvies, the Cuddie Headriggs, and the Sandy Mackayes of the modern tale-writers—two flights of new crea-

tures take wing from the volumes before us. In a Pantheon already so multitudinous, the new comers run no small risk of being soon lost in the throng; for a while, however, they will be remembered at our firesides, and invoked as ministers of harmless enjoyment. First, with the gentle and dreamy David Copperfield at its head, comes a train of figures such as Dickens loves to draw—Steerforth, the handsome, the brave, the selfish, whose awful end is told with such tragic terror; Mr. Peggoty the elder, who appears in the beginning of the story only as a hearty Yarmouth fisherman, but becomes absolutely heroic ere the close; the three other Peggotys, honest inarticulate Ham, poor lost little Em'ly, and Peggoty of the buttons; the affectionate broken-spirited Mrs. Copperfield, with her tormentors, the Murdstones; the active aunt, Betsy Trotwood, with her ward, Mr. Dick; the inimitable Micawber family; the good, absurd Traddles; the dying child-wife Dora, and her successor Agnes; Rosa Dartle, the fierce, the fiendish, with the scar on her lip; the "willin'" Barkis, the "lone lorn" Mrs. Gummidge, the "'umble" Heep, the "respectable" Littimer, and very many more. Surrounding the vain and clever Mr. Arthur Pendennis, on the other hand, comes a group quite different, and quite Thackeristic—the fine, firm, worldly old Major; the pious, fond Mrs. Pendennis, and the high-spirited Laura; the Fotheringay, stupid, yet a glorious actress; her father, the maudlin, tipsy reprobate, Captain Costigan; the Clavering family, with that repetition of Becky, the syren Blanche Amory; the all-accomplished Chevalier Strong; Monsieur Mirobolant, the French cook; Pen's friend and Mentor, the manly, rough, cynical George Warrington, who was found "drinking beer like a coal-heaver, and yet you could see he was a gentleman;" shrewd, likeable, little Harry Foker; poor, lonely Bows, the musician; Captain Shandon, the reckless dissolute man of genius, with his literary attendants, the Finucanes, the Doolans, the Bludyers, and the rest; Bungay, the publisher, and Mrs. Bungay; Morgan, the major's man; Fanny Bolton and Mr. Huxter; Madame Fribsby, the milliner, and minor characters innumerable. A glance even at these mere lists of *dramatis personæ*, will, we think, verify our preceding remarks, and recognise Mr. Dickens as being decidedly the more poetical and ideal, and Mr. Thackeray as being decidedly the more world-like and real in the style and tendency of his conceptions. For our own part, liking both styles well, we would point out as our favourite characters in the one group, Steerforth, the elder Mr. Peggoty, Mr. Micawber, and the child-wife Dora; and as our favourites in the other, the Major, Captain Costigan, Blanche Amory, and George Warrington. Were we required to say which single character is, to our taste, artist-

ically the best in each, we should hesitate, in the one case, between Mr. Peggoty and the child-wife, in the other, between Major Pendennis and George Warrington; but, in the end, allowing ourselves to be swayed by sentimental liking, we should probably decide for the child-wife and Warrington. The former is an exquisite and most touching conception, such as Mr. Dickens has hardly equalled before; the latter is a perfectly original addition to our gallery of fictitious portraits, and is especially interesting as being a nearer approach than Mr. Thackeray had before favoured us with, to an exhibition of his serious *beau idéal* of a man. We are great admirers of "the stunning Warrington."

But, after all, it is by the moral spirit and sentiment of a work of fiction, by that unity of view and aim which pervades it, and which is the result of all the author's natural convictions and endowments, all his experience of life, and all his intellectual conclusions on questions great and little—it is by this that the worth of a work of fiction, and its title to an honourable place in literature, ought ultimately to be tried. Even the consideration of artistic merit will be found ultimately to be involved in this. The characters and scenes of a novelist, and the mode in which he evolves his plot from the commencement to the catastrophe, are but the special means by which, in his particular craft, it is allowed him to explain his beliefs and philosophy. Whether he does so consciously or unconsciously, whether he boasts of his philosophic purpose, or scouts the idea of having such a purpose, it is all the same. It remains for us, therefore, to go somewhat deeper than we have hitherto done, in our discrimination of the spirit of Thackeray's, as compared with the spirit of Dickens's writings. Here also "Pendennis" and "Copperfield" shall form the chief ground of our remarks.

Into this important question, as between the two novelists, the public has already preceded us. Go into any circle where literary talk is common, or take up any popular critical periodical, and the same invariable dictum will meet you—that Dickens is the more genial, cheerful, kindly, and sentimental, and Thackeray the more harsh, acrid, pungent, and satirical writer. This is said everywhere. Sometimes the criticism even takes the form of partizanship. We have known amiable persons, and especially ladies, express, with many admissions of Thackeray's talent, a positive dislike to him as a writer—grounding this dislike on his evident tendency to fasten on the weaknesses and meannesses, rather than on the stronger and nobler traits, of human nature; his delight, for example, in making his readers conceive a rouged old duchess without her wig and false teeth, an elderly Adonis without his padding and stays, or a romantic young lady eating

voraciously in her own room. In print, also, we have seen Mr. Thackeray taken to task for his exclusive preaching of the maxim "Humbug everywhere," and his perpetual exhibition of the skeleton that is in every house. On the other hand, there are persons, and ladies too among them, who take Thackeray's part, and prefer his unsparing sarcasm, bracing sense, and keen wit, to what they are pleased to call the sentimentalism of his rival. From what we have observed, however, we should think that Mr. Thackeray's partizans are the fewer in number.

All this, which was, of course, well known to Mr. Thackeray himself long ago—as witness his "*Kickleburys on the Rhine*," where Miss Kicklebury calls Mr. Titmarsh a naughty man and positively wicked in his satire, and poor Captain Hicks expresses his uneasy sense that the same Mr. T. is going to *cawickachaw* him—has recently been brought before his notice in a somewhat rousing manner. On the publication of the "*Kickleburys*" there appeared, as every one knows, a short review of it in the *Times* newspaper, in which the reviewer, to use the homely phrase employed in speaking of the matter by one of Mr. Titmarsh's friends, "walked into" the little book and its author. Here are one or two of the reviewer's sentences :—

"To those who love to hug themselves in a sense of superiority by admeasurement with the most worthless of their species, in their most worthless aspects, the *Kickleburys on the Rhine* will afford an agreeable treat, especially as the purveyor of the feast offers his own moments of human weakness as a modest *entrée* in this banquet of erring mortality. To our own, perhaps unphilosophical, taste the aspirations towards sentimental perfection of another popular author are infinitely preferable to these sardonic divings after the pearl of truth, whose lustre is eclipsed in the display of the diseased oyster. * * Mr. Thackeray's pencil is more congenial than his pen. He cannot draw his men and women with their skins off, and, therefore, the effigies of his characters are pleasanter to contemplate than the flayed anatomies of the letter-press."

With what merciless wit Mr. Thackeray replied to the attack in the *Times*, and with what ridicule he contrived to cover its anonymous author, everybody knows who is in the habit of keeping up with the history of our current literature. Still, we must say that Mr. Thackeray, in his reply, left the main charge untouched. Referring with much humour and effect to the heavy language of the foregoing sentences, he did not discuss their meaning. He had, probably, good grounds for this. It is not on every trivial occasion that a man is bound to argue on so deep a question as the tendency and structure of his own genius; and in this particular case the matter was made more delicate by

the comparison which the reviewer had contrived to involve between Mr. Thackeray and Mr. Dickens. Yet, Mr. Thackeray may depend upon it, this is the kernel of the whole dispute between him and the public. As on many other occasions, the *Times* has only said tonitruously and from a mountain top what everybody has been saying low down at any rate. Having no reasons to restrain *us* from saying what we think on the matter, we will express ourselves freely.

In the first place, then, the question as between "the aspirations after sentimental perfection" of Mr. Dickens, and the "sardonic divings" of Mr. Thackeray, connects itself with what we have been saying as to the styles of the two authors. "Aspiration after sentimental perfection," in other words, the habit of representing objects in an ideal light, is a necessary ingredient in that poetic or romantic style of art which Mr. Dickens practises; and "sardonic diving," as the reviewer expresses it, is quite as necessary an ingredient in Mr. Thackeray's constitution as an artist of the real school. You may prefer the style of Reynolds to the style of Hogarth, if you like, and, if this is all that the reviewer meant, his taste was not necessarily unphilosophical; but you have no right, while admitting both styles of art, to insist that there shall be but one method. It may be proper enough for one artist to exhibit "the pearl of truth" in quite ideal circumstances and conditions—pure-cushioned, for example, on the crimson lining of a casket; but it may be as legitimate for another artist to display the pearl (display it still artistically remember) in its real and native bed—the hollow of the opened oyster. As pearls neither grow in crimson caskets, nor get thither by their own exertions, and are yet justly admired when found there, so it is no valid objection to Mr. Dickens's writings, in his style of art, that they represent men and women ideally, and as they never existed, or have existed only by flashes and at moments; but, on the other hand, what we require of a writer like Mr. Thackeray is, that, whether in delineating the bad or the good, he shall not exceed the proportions of the real. Nor do we think that he has done so. Abundant as are the rogues, fools, and bores in Mr. Thackeray's fictions, we believe he has kept very nearly the numerical ratio that Nature herself observes in her supply of such individuals; and he imitates Nature, too, in marking even his black characters with occasional veins of white. But he does not paint only rogues, fools, and bores; he paints, also, (though even here he *will* give the foibles,) good and amiable characters. True, as is frequently said, his amiable characters are often sadly silly, and not half so interesting as his bad ones—his Becky, for example, being a much more attractive person than his Amelia, and his Blanche Amory carrying off the

palp of interest both from Mrs. Pendennis and Laura. Even here, however, we fear he is not quite unnatural. And then his Warrington is really a noble fellow! In short, Mr. Thackeray is an excellent artist in his own style; and we should greatly fear that, if he were to be foolish enough to change that style, out of respect to any momentary expression of critical opinion, and to attempt the finer and dreamier imaginings in which Dickens excels, the result would be as when Wilkie did affect, or as if Hogarth had affected, high ideal art. And why should he do so? There may be one spirit, one general aim towards the increase of good in the world, and yet many instrumentalities, many modes of working. Religion itself, in prescribing the process of moral education, recognises two methods—that of hanging forth before men fine and noble ideals, which they may contemplate with an enthusiastic melancholy in their private solitude; and that of punishing them sharply, and inflicting on them instant and public shame, for their actual vices. And so, while a writer like Dickens may do good in one way, a writer like Thackeray may do good in another. Ask the waiters at the London clubs, if Mr. Thackeray's exposition of human nature as manifested in these institutions has not been of some service to them. Probably the reason why many readers do not like Mr. Thackeray's writings is, that they find them too personal in their allusions. So much the better. There are many corners of society, "frae Maidenkirke to John o' Groat's," as well as farther south, into which we should like to introduce a wholesome terror of Michael Angelo Titmarsh.

But whence arises this difference between the two writers? Why is Mr. Dickens, on the whole, genial, kindly, and romantic, and Mr. Thackeray, on the whole, caustic, shrewd, and satirical in his fictions? Clearly, the difference must arise from some radical difference in their ways of looking at the world, and in their conclusions as to the business and destinies of men in it.

Kindliness is the first principle of Mr. Dickens's philosophy, the sum and substance of his moral system. He does not, of course, exclude such things as pain and indignation from his catalogue of legitimate existences; indeed, as we have seen, few writers are capable of more honest bursts of indignation against what is glaringly wrong; still, in what may be called his speculative ethics, kindliness has the foremost place. His purely doctrinal protests in favour of this virtue, would, if collected, fill a little volume. His Christmas Books have been, one and all, fine fantastic sermons on this text; and, in his larger works, passages abound enforcing it. Not being able to lay our hands at this moment on any passage of this kind in "*Copperfield*,"

short, and at the same time characteristic, we avail ourselves of the following from "*Barnaby Rudge*."

Mr. Dickens's Apology for Mirth.—"It is something even to look upon enjoyment, so that it be free and wild, and in the face of nature, though it is but the enjoyment of an idiot. It is something to know that Heaven has left the capacity of gladness in such a creature's breast; it is something to be assured, that however lightly men may crush that faculty in their fellows, the Great Creator of mankind imparts it even to his despised and slighted work. Who would not rather see a poor idiot happy in the sunlight, than a wise man pining in a darkened jail? Ye men of gloom and austerity, who paint the face of Infinite Benevolence with an eternal frown, read in the everlasting book, wide open to your view, the lesson it would teach. Its pictures are not in black and sombre hues, but bright and glowing tints; its music, save when ye drown it, is not in sighs and groans, but songs and cheerful sounds. Listen to the million voices in the summer air, and find one dismal as your own. Remember, if ye can, the sense of hope and pleasure which every glad return of day awakens in the breast of all your kind, who have not changed their nature; and learn some wisdom even from the witless, when their hearts are lifted up, they know not why, by all the mirth and happiness it brings."

This doctrine, we repeat, is diffused through all Mr. Dickens's writings, and is affirmed again and again in express and very eloquent passages. Now, certainly, there is a fine and loveable spirit in the doctrine; and a man may be borne up by it in his airy imaginings, as Mr. Dickens is, (we might add the name of Mr. Leigh Hunt,) so cheerily and beautifully, that it were a barbarity to demur to it at the moment without serious provocation. Who can fail to see that only a benevolent heart, overflowing with faith in this doctrine, could have written the "*Christmas Chimes*," or conceived those exquisite reminiscences of childhood which delight us in the early pages of "*Copperfield*?" But when Mr. Dickens becomes aggressive in behalf of his doctrine, as he does in the foregoing, and in fifty other passages; when, as Mr. Cobden is pugnacious for peace, and as some men are said to be bigots for toleration, so Mr. Dickens is harsh in behalf of kindness—then a word of remonstrance seems really necessary. Is the foregoing doctrine, then, so axiomatic and absolute that no one may, without moral ugliness of soul, impugn or limit it? For our part, we do not think so. We know men, and very noble men, too, who would *not* rather see a poor idiot happy in the sunlight than a wise man pining in a darkened jail; we know men, and very cheerful men, too, who do *not* find the pictures of the book of nature to be all in bright and glowing tints, nor the sounds of nature to be all pleasant songs. In short, in his anti-

pathy to Puritanism, Mr. Dickens seems to have adopted a principle closely resembling that which pervades the ethical part of Unitarianism, the essence of which is, that it places a facile disposition at the centre of the universe. Now, without here offering any speculative or spiritual discussion, which might be deemed inappropriate, we may venture to say, that any man or artist who shall enter upon his sphere of activity, without in some way or other realizing and holding fast those truths which Puritanism sets such store by, and which it has embodied, according to its own grand phraseology, in the words sin, wrath, and justice, must necessarily take but half the facts of the world along with him, and go through his task too lightly and nimbly. To express our meaning in one word, such a man will miss out that great and noble element in all that is human—the element of *difficulty*. And though Mr. Dickens's happy poetic genius suggests to him much that his main ethical doctrine, if it were practically supreme in his mind, would certainly leave out, yet we think we can trace in the peculiar character of his romantic and most merry phantasies something of the want of this element.

Mr. Thackeray being, as we have already hinted, less dogmatic in his habits of writing than Mr. Dickens, less given to state and argue maxims in a propositional form, it is not so easy to obtain passages from his writings explaining his general views in the first person. On the whole, however, judging from little indications, from the general tone of his writings, and from literary analogy, we should say that he differs from Mr. Dickens in this, that, instead of clinging to any positive doctrine, from the neighbourhood of which he might survey nature and life, he holds his mind in a general state of negation and scepticism. There is in "Pendennis" a very interesting chapter, entitled "*The Way of the World*," written after that severe illness which interrupted the author in the progress of his work, and threatened to do more, and in which Mr. Thackeray falls into a more serious strain than usual. A long, and almost religious, dialogue takes place between Pen, then in a low moral state, and professing himself a sceptic and *pococurante*, and his elder friend Warrington, who retorts his arguments, denounces his conclusions, and tries to rekindle in him faith and enthusiasm. The dialogue is thus wound up:—

Pen and Warrington philosophizing.—"We are not pledging ourselves for the correctness of his (Pen's) opinions, which readers will please to consider are delivered dramatically, the writer being no more answerable for them, than for the sentiments uttered by any other character of the story. Our endeavour is merely to follow out in its progress the development of the mind of a worldly and selfish, but not ungenerous or unkind, or truth-avoiding man. And it will be seen that the

lamentable stage to which his logic has at present brought him, is one of general scepticism, and sneering acquiescence in the world as it is; or, if you like so to call it, a belief, qualified with scorn, in all things extant. The tastes and habits of such a man prevent him from being a boisterous demagogue, and his love of truth, and dislike of cant, keep him from advancing crude propositions, such as many loud reformers are constantly ready with, much more from uttering downright falsehoods, in arguing questions or abusing opponents, which he would die or starve rather than use. It was not in our friend's nature to be able to utter certain lies; nor was he strong enough to protest against others, except with a polite sneer; his maxim being, that he owed obedience to all Acts of Parliament, as long as they were not repealed.

“And to what does this easy and sceptical life lead a man? Friend Arthur was a Sadducee, and the Baptist might be in the wilderness, shouting to the poor, who were listening with all their might and faith to the preacher's awful accents and denunciations of wrath or woe or salvation; and our friend, the Sadducee, would turn his sleek mule with a shrug and a smile from the crowd, and go home to the shade of his terrace, and muse over preacher and audience, and turn to his roll of Plato, or his pleasant Greek song-book, babbling of honey and Hybla, and nymphs and fountains, and love. To what, we say, does this scepticism lead? It leads a man to a shameful loneliness and selfishness, so to speak—the more shameful because it is so goodhumoured and conscienceless and serene. Conscience! What is conscience? Why accept remorse? What is public or private faith? Mythuses alike enveloped in enormous tradition. If, seeing and acknowledging the lies of the world, Arthur, as see them you can, with only too fatal a clearness, you submit to them without any protest further than a laugh; if, plunged yourself in easy sensuality, you allow the whole wretched world to pass groaning by you unmoved; if the fight for the truth is taking place, and all men of honour are on the ground, armed on the one side or the other, and you alone are to lie on your balcony and smoke your pipe, out of the noise and the danger—you had better have died, or never have been at all, than such a sensual coward.

“‘The truth, friend!’ Arthur said, imperturbably; ‘where is the truth? Show it me. That is the question between us. I see it on both sides. I see it on the conservative side of the house, and amongst the radicals, and even on the ministerial benches. I see it in this man, who worships by Act of Parliament, and is rewarded with a silk apron and five thousand a-year; in that man, who, driven fatally by the remorseless logic of his creed, gives up everything, friends, fame, dearest ties, closest vanities, the respect of an army of churchmen, the recognised position of a leader, and passes over, truth-impelled, to the enemy, in whose ranks he will serve henceforth as a nameless private soldier. * * * Yes, I am a Sadducee, and I take things as I find them, and the world, and the Acts of Parliament of the world, as they are; and, as I intend to take a wife, if I find one, not to be madly in love, and prostrate at her feet, like a

fool, not to worship her as an angel, or to expect to find her as such, but to be good-natured to her, and courteous, expecting good-nature and pleasant society from her in turn. And so, George, if ever you hear of my marrying, depend on it, it won't be a romantic attachment on my side; and if you hear of any good place under Government, I have no particular scruples, that I know of, which would prevent me from accepting your offer.'

" 'O Pen, you scoundrel! I know what you mean,' here Warrington broke out. 'This is the meaning of your scepticism, of your quietism, of your atheism, my poor fellow. You're going to sell yourself, and Heaven help you! You are going to make a bargain which will degrade you, and make you miserable for life, and there's no use talking of it. If you are once bent on it, the devil won't prevent you.' "—*Pendennis*, vol. ii. pp. 236-238.

After Mr. Thackeray's protest that he is not to be held responsible for Pen's opinions, as delivered in the foregoing extract, and in the dialogue which precedes it, we may not, of course, seek his philosophy in these opinions alone. Indeed, we are too thankful to Mr. Thackeray for having had the boldness to introduce so serious a passage at all into a work of popular fiction, to wish to take any unfair advantage of it. But, it will be observed, Mr. Thackeray does not only report Pen's opinions, he also comments on these opinions very gravely in his own name, and he combats them through the medium of Warrington. When, however, a writer is at the pains to represent dramatically both the *pro* and the *con* of any question, we may be pretty sure that he has distributed nearly the entire bulk of his own sentiments on it between the two speakers to whom he assigns the task of conducting the argument. Accordingly, it seems to us, that in this antinomy between Pen and Warrington, we may, without any injustice, discern the main features of the author's own philosophy of life. In other words, it seems to us that there are many parts of Mr. Thackeray's writings in which the spirit of the *Pendennis* theory may be assumed to predominate; but that, ever and anon, traces of the Warrington spirit are also to be found in them.

Pen, in the passage before us, appears as a *pococurante* and a sceptic. Still honest and kindly, and above any positive meanness, he has sunk, for the time, into a general lowness of the spiritual faculty, the visible form of which is "a sneering acquiescence with the world as it is," or rather "a belief, qualified with scorn, in all things extant." But precisely here lies the point. To a man in this state of mind, all the things that do exist are not *extant*. As his eye sweeps through the universe, it rests by an internal necessity only on the meaner, minuter, and more terrestrial phenomena, which strike by their intense nearness; while the facts of the higher physics fade away into an invis-

bility, which, like that of the stars by day, passes for non-existence. Beings like Raphael, Gabriel, and Michael, may, as the poet sublimely teaches, sing of God's mightier works—of the sun hymning in chorus with his kindred stars, of the fair earth wheeling on her axis, of the storms that rage between land and sea. *They* may speak of these things, for these things are extant to their vision. But let Mephistopheles enter, and how the note is changed! *He* cannot talk fine; *he* cannot gabble of suns and worlds, and all that sort of thing! What *he* sees and can report upon, is a far more matter-of-fact concern—how men are daily growing more foolish and miserable; how the little god of earth is still as odd in his ways as ever, and is continually getting into some new mess or other! Precisely such, though with less profundity and more principle, is the spirit of Pen. He is, like Mephistopheles, a *pococurante*. The higher things of the world not being extant for him, he qualifies his belief in all he does see with a sneer. Suppose, now, this spirit transferred into literature; how will it show itself there? In a general tone of scoffing; in a disbelief in enthusiasm, or any species of mental exaltation; in a tendency to avoid in one's self, and to turn into ridicule in others, all words or phrases that recognise the diviner truths of existence or the higher developments of mind; in a fondness for scandal and vile social investigations, and in a distaste for the magnificent and the beautiful. What, for example, is Mephistopheles's speech in the presence of the angels, but another version of that of which our modern literature is full—a perpetual tirade against such entities and expressions as (to enumerate a few in different departments,) spiritual-mindedness, fervid affection, a Christian life, the transcendental metaphysics, noble aspiration, high art? It would be unjust to say that, even in the least earnest portion of Mr. Thackeray's writings, he exhibits the spirit of scorn to anything like this extent. An admirer of Tennyson—the poet who, most of all men living, represents, and would woo back among us, the rare, the religious, and the exquisite—could hardly do this. Still, Mr. Thackeray is not altogether blameless in this respect; and, probably, whatever amount of truth there is in the general complaint against him, as a writer who delights in the contemplation of human weaknesses and absurdities, may be resolved into the cause under notice.

But there are moments in Mr. Thackeray's writings when Warrington breaks in. Believing many things that Pen believes; sympathizing with him in many of his feelings, and probably without any much more definite creed of his own, that he could state in words—Warrington is yet a nobler being than Pen. Higher things are extant to him; and though his hatred of

cant, and his rough cynical habit, would probably lead him to show his sense of these things in any other way rather than that of seasoning his talk with references to them, and might even prompt him to kick the words art, the ideal, transcendentalism, &c., to death, if ever they came too provokingly across his path, (a murder in which, but that the words still do serve a kind of useful purpose, we know many that would assist him); yet in his own soul he cherishes a fund of finer emotion, which will betray itself in bursts and flashes. Something of this we remark in Thackeray himself. It is seen in the general conception of some of his characters, such as Laura and Mrs. Pendennis, as well as Warrington; it is seen in occasional passages of serious reflection, of which perhaps the most remarkable is the one from which we have made an extract; and it is seen also in a frequent touch of real pathos, such as no mere affectation of the sorrowful could enable a writer to assume. On the whole, we should say that Mr. Thackeray has nowhere exhibited this serious spirit so conspicuously as in the second volume of his "Pendennis;" and remarking this, and how good the effect is, we must admit, without any prejudice to our previous observation regarding the necessity of Mr. Thackeray's keeping obstinately to his own style of art, that we should like to see him in future diminish the Pen a little and develop the Warrington.

There is one piece of positive doctrine, however, in which both Pen and Warrington agree, and of which Mr. Thackeray's writings are as decidedly the exponents in the present day, as Mr. Dickens's are of the doctrine of kindness. This doctrine may be called the doctrine of *Anti-snobism*. Singular fact! in the great city of London, where higher and more ancient faiths seem to have all but perished, and where men bustle in myriads, scarce restrained by any spiritual law, there has arisen of late years, as there arose in Mecca of old, a native form of ethical belief, by which its inhabitants are tried and try each other. "Thou shalt not be a snob," such is the first principle at present of Cockney ethics. And observe how much real sincerity there is in this principle, how it really addresses itself to facts, and only to facts, known and admitted. It is not the major morals of human nature, but what are called the minor morals of society, and these chiefly in their æsthetic aspect, as modes of pleasant breeding, that the Cockney system of ethics recognises. Its maxims and commands are not "Thou shalt do no wrong," "Thou shalt have no other Gods before me," "Thou shalt not covet,"—but "Thou shalt pronounce thy H's," "Thou shalt not abuse waiters as if they were dogs," "Thou shalt not falsely make a boast of dining with peers and Members of Parliament." He who offends in these respects is a snob.

Thus, at least, the Cockney moralist professes no more than he really believes. The real species of moral evil recognised in London, the real kind of offence which the moral sentiment there punishes, and cannot away with, is snobbism. The very name, it will be observed, is characteristic and unpretentious—curt, London-born, irreverent. When you say that a man is a snob, it does not mean that you detest and abhor him, but only that you must cut him, or make fun of him. Such is *Anti-snobbism*, the doctrine of which Mr. Thackeray, among his other merits, has the merit of being the chief literary expounder and apostle! Now it is not a very awful doctrine, certainly; it is not, as our friend Warrington would be the first to admit, the doctrine in the strength of which one would like to guide his own soul, or to face the future and the everlasting; still it has its use, and by all means let it have, yes, let it have its scribes and preachers!

We had thought, after this more grave investigation, to indulge in some remarks illustrative more especially of the humours of the two writers, as compared with each other, of the forms of the comic in which they respectively excel and show their mastery. Here also we should have seen the difference of their ultimate method and spirit; and should have found Dickens to be the more kindly, genial, and fantastic, and Thackeray to be the more tart, satirical, and truculent humorist. Forbearing any such process of contrast, however, the scope and results of which we have already indicated, we must close with a general remark, applicable to both writers.

Although the aim of all fictitious literature is primarily to interest the reader; and although, in a certain deep sense, it may be maintained that no kind of literary composition whatever is valuable that is not interesting, it would yet seem as if recently the determination to achieve that special kind of interest which consists in mere amusement, had prevailed too largely among our writers of tales and novels. We do not often see now that effort at artistic perfection, that calm resolution to infuse into a performance the concentrated thought and observation of the writer, and to give it final roundness and finish, which did exist in old times, and which supreme authorities have always recommended. The spirit of craft and money-making has crept into our artistic literature; and, even in our best writers, we have but a compromise between the inner desire and the outer necessity. Nor is this to be very harshly condemned, or very gravely wondered at. Our writers of fiction, for the most part, candidly own that they write to make money and amuse people. Their merit is therefore the greater, when, like the two eminent writers whose works we have been discussing, they do more than this. Should we suggest that their functions would be intrinsically higher, and more satis-

factory to their own better judgment, did they work less according to the external demand, and more according to the internal wish and form, they will admit the suggestion to the full, but say that on the whole they are not strong enough to follow it. Should we farther adduce the old consideration of fame, and the opinion of posterity, as an argument on the right side, they may even turn the laugh against us. "Posterity!" they may say, with Mr. Merryman in the Prelude to Faust:—

Would of posterity I heard less mention!
Suppose posterity had *my* attention,
Who'd make contemporary fun?

Besides, in the present and still increasing multitudinousness of books and authors, the chance of having readers among posterity is, even for the best, a very sorry hope. Still, we would adhere to our wish; and that very multitudinousness of books and authors may bring us right again one day. There are two literary devices or fashions to which at present one may trace much of the particular evil now under view. The one is the fashion or device of the three-volume novel; the other the fashion of publishing novels in serial numbers. The first, which we are happy to see is losing ground, is a wretched piece of publisher's despotism in literature, redeemed from absolute vileness only by that mystical artistic value which there is, and always will be, in the number three. The other, which is still gaining ground, operates deleteriously, by compelling an author to supply the parts of his story before he has thoroughly conceived the whole, and also by compelling him to spice each separate part, so that it may please alone. These conditions exist, and it is not given to any man, in any time, to be independent of conditions that will thwart him, and compel him to deviate from his ideal of excellence. Still, if such writers as Dickens, Thackeray, and Jerrold, who have already earned a reputation, who have as much talent as any of those past novelists of whom our literature is proud, and who may even venture now to lead the public against its own prejudices, were to set the example, by each doing his best, in the style each in his inner heart believes to be best, the good that would be effected might be very great.

- ART. IV.—1. *Formal Logic ; or, the Calculus of Inference, Necessary and Probable.* By AUGUSTUS DE MORGAN, of Trinity College, Cambridge, Fellow of the Cambridge Philosophical Society, Secretary of the Royal Astronomical Society, Professor of Mathematics in University College, London. London, 1847.
2. *On the Symbols of Logic, the Theory of the Syllogism, and, in particular, of the Copula, and the Application of the Theory of Probabilities to some Questions of Evidence.* From the Transactions of the Cambridge Philosophical Society. Vol. IX. Part I. By AUGUSTUS DE MORGAN, Sec. R.A.S., of Trinity College, Cambridge, Professor of Mathematics in University College, London. Cambridge, 1850.
3. *An Outline of the Necessary Laws of Thought ; A Treatise on Pure and Applied Logic.* By WILLIAM THOMSON, M.A., Fellow and Tutor of Queen's College, Oxford. London and Oxford, 1849.
4. *An Essay on the New Analytic of Logical Forms, being that which gained the Prize proposed by Sir William Hamilton, in the year 1846, for the best Exposition of the New Doctrine propounded in his Lectures. With an Historical Appendix.* By THOMAS SPENCER BAYNES, Translator of the Port-Royal Logic. Edinburgh and London, 1850.

LOGIC, in so far as it investigates the laws of the process performed, consciously or unconsciously, by all sound thinkers, has been aptly compared to grammar, which in like manner inquires into the principles of correct speech. The parallel might be carried further. There is an analogy in their perversions, as well as in their legitimate offices. Grammar, elevated into Gramarye,* has been regarded as enabling its fortunate possessor to penetrate into the mysteries of the unseen world ; and Logic, burdened with the incubus of Realism, has been considered as affording an insight into the no less mysterious essences of things in general. Less fortunate, however, than its sister science, Logic has scarcely yet been able entirely to emancipate itself from its early bondage. No one now regards Lindley Murray as a wizard, or those fair disciples by whom he is chiefly studied as possessing more of the black art than is contained in the

* See Bishop Percy's note to the ballad of King Estmere.

natural magic of a Lancashire witch. While Logic, though slowly and painfully working its way to its proper position, as *the science of the laws of formal thinking*, meets every now and then with a rude recall to material associations. The slave has broken prison, but the master has not yet relinquished his claim; and the fugitive still carries about him some links of his chain, by which ever and anon some emissary of his former tyrants seeks to drag him back to the burdens and the flesh-pots of his servitude.

Perhaps there is no branch of human knowledge of which the history presents anomalies so strange and startling as that of Logic. From age to age it has blended itself with the matter of predominant interest, and its nature, its form, its province, have in each successive stage been perpetually the theme of doubt and controversy. At one time an instrument of philosophy, at another the handmaid of divinity, now a method of demonstration, and now an art of thinking, allying itself at different periods with physics, with metaphysics, with psychology, with theology, now formal, and now material, in this generation a science, in that an art, sometimes both, and sometimes neither,—it is scarcely to be wondered at that these Protean metamorphoses have caused at times its very basis to be questioned, and that adversaries should have occasionally applied to it the language of its founder on a very different subject, χαμαιλέοντά τινα καὶ σαθρῶς ἰδρύνμενον.

And yet, notwithstanding these various doctrines concerning the nature and province of Logic, its actual contents have at no time essentially varied. Scarcely any two logicians are in accordance as to what it is that they are expounding; scarcely any have in their exposition materially added to or taken from the original body of the system. Logic is not, like mathematics or physical science, the result of the united discoveries of successive generations. It is the offspring almost entirely of one master mind, to whose authority nearly every disputant has appealed, as decisive on his own side of the question. It is not like the river, which, springing at first from some obscure and insignificant source, receives in its progress the waters of tributary streams, acquiring, still under the same title, a wider channel and an ampler volume, till the name which the inland peasant associates with some petty rivulet is to the merchant the broad highway of commerce, and to the mariner a sea, bearing navies on its bosom. It is the work of one age and of one man,—a Pallas, which sprang full grown and full armed from the head of her parent,—a monument which after generations have contented themselves with commenting on and elucidating, without adding to or diminishing from the original. Other gods have removed

from their habitations ; the fane of Terminus still stands on its pristine site ; but its votaries are notwithstanding at variance as to its size and form, inquiring what parts are principal, what subordinate, what merely ornamental, what was the design of the architect, and how he has adhered to it in the execution.

As regards what Aristotle did, there is much truth in the remark of Kant, that since the time of the Stagirite, Logic has neither advanced nor receded a step. As regards what Aristotle left undone, it is no less true that its whole subsequent history exhibits scarcely anything but the ebb and flow of unsettled opinion. The master left behind him a collection of writings ; and to the substance of that collection his disciples have for the most part faithfully adhered : he left no definition of the science on which he wrote and no principle for determining its boundaries ; and these accordingly have been matter of controversy ever since.

The above remarks apply only to the state of Logic from Aristotle to Kant. Its history since the latter period presents a singular and instructive contrast to its former fortunes. A few writers indeed have rigidly adhered to or even narrowed the Kantian limits, but the predominant feature of speculation has been an inverted attempt at expansion. The general idea of the science becomes, with slight variety, tolerably fixed and definite ; the province which that idea includes, varies almost from zero to infinity. In short, while the pre-Kantian logicians have laboured to accommodate the form to the matter, to comprehend under one general notion the heterogeneous mass of Aristotelian speculation, the post-Kantian logicians have striven to develop the matter from the form, starting from the idea of thought and its processes, to construct a science more or less comprehensive, according as the domain of *pure thinking* is extended or contracted. This revolution is a natural consequence of the Critical Philosophy. The understanding, being thereby limited to the field of possible experience, became confessedly finite in its capacity and objects. There remained, therefore, no alternative for the future metaphysician, but either to abandon altogether the philosophy of the infinite, or to assume, in opposition to Kant, the existence of a directly cognitive faculty of Reason,—a faculty independent of the acknowledged laws of finite thinking. It had been proved impossible to contract the object within the received grasp of the subject ; there remained only the attempt to expand the subject to the compass of the object ; an attempt which necessarily ended in the identification of the two. Both the method and the nomenclature became thus inverted, and metaphysic, reversing the complaint of Aristotle, assumes the name

and garb of dialectic,* not unmixed with sophistry. Thought and Being become one and the same; the reasoning process is a continual creation of the universe; and Logic, the science of pure thinking, is at the same time a revelation of the whole mystery of existence.†

The ancient metaphysic is described by Hegel as finite thought striving after the infinite; the Understanding attempting to contemplate the objects of the Reason.‡ But his own system escapes the charge at the close only by an act of suicide at the outset. The ancient philosophy merely overtasked the untried power of thought. Its successor commences by giving the lie to consciousness, and denying the validity of the very laws by which itself, in common with all human thought, is in act regulated. Logic has thus realized the fabled death of its founder. Unable to fathom the ebb and flow of the Euripus of Being, it has ended by drowning itself in the current. Among the struggles preceding the grand euthanasia, there have not been wanting speculations more akin to some of those which we propose to notice in this Article—speculations tending to identify logic, and through logic metaphysic, with mathematics. There is not indeed much affinity between the details of Mr. De Morgan's system and that of Bardili; but in both we may trace the same error of regarding reasoning as a *computation*, giving a partial and perverted view of the process of thought and its expression by means of mathematical analogies and a mathematical notation, inverting the relation of whole and part, subordinating logic to algebra, and substituting the calculus of inference for the inference of calculation. Verily, in philosophy, as elsewhere, extremes meet. Who would have expected to see English mathematicians extending the hand of fellowship to Hobbes, or German metaphysicians repeating the maxim of Condillac, "*calculer c'est raisonner, et raisonner c'est calculer*?"§

But the Logic of modern Germany is a subject too vast and too important to be discussed within our present limits. We

* Metaph. III. 2. Οἱ γὰρ διαλεκτικοὶ καὶ σοφισταὶ ταῦτ' ὅν μιν ὑπαδύονται σχῆμα τῆς φιλοσοφίας (ἡ γὰρ σοφιστικὴ φαινομένη μόνον σοφία ἐστίν, καὶ οἱ διαλεκτικοὶ διαλέγονται περὶ πάντων) κοινὸν δὲ πᾶσι τὸ ὄν ἐστίν.

† "Bei der Exposition des reinen Begriffs," says Hegel, "ist angedeutet worden, dass derselbe der absolute, göttliche Begriff selbst ist, so dass jener logische Verlauf die unmittelbare Darstellung der Selbstbestimmung Gottes zum Seyn wäre." The mock thunder of Salmoneus was modesty itself to this. But our modern Salmoneus, while apparently raising man to an equality with his Maker, in fact only degrades the Deity to an identity with the general consciousness of mankind.

‡ Die blosse Verstandes-Ansicht der Vernunft-Gegenstände.

§ *Langue des Calculs*, l. I. ch. 16. It is unfortunate for the *computation* doctrine that the fundamental processes of arithmetic, under which, according to Hobbes, all ratiocination is comprehended, are not reasoning processes at all.

have alluded to it chiefly as furnishing an instructive comment on what we believe to be the fundamental defect in Kant's treatment of the science,—the entire isolation of Logic from Psychology, the rejection, under the name of empirical, of all the special phenomena of consciousness, of all the actual characteristics of any determinate operation of thought. To this subject we may possibly find another opportunity of recurring. Our present concern is with the position and prospects of Logic in our own country; with the striking fact of a considerable amount of revived interest in the study, and with the important question, how that interest may be best controlled and directed.

In this point of view, the works which we have placed at the head of this Article claim the attention of our readers. They are the representatives of two distinct, and in some respects antagonist systems, each professing to contribute a large addition to the hitherto authorized contents of the science, and each claiming, as the basis of its extension, the principle of a more exact analysis of the *form* of Thought. The pretensions of either, if admitted, will necessitate a complete remodelling of the existing details of the science,—a step too important to be undertaken without a thorough sifting and testing of the grounds on which it is recommended. So important a crisis in the history of Logic demands on the part of a journal that professes to watch the chief contemporaneous evolutions of the mental and physical sciences some notice, which we shall endeavour to bestow upon it in the following pages.

The exposition of one of these systems is given in the *Formal Logic* of Professor De Morgan; the other has for some years been taught in the unpublished lectures of Sir William Hamilton, and its essential features may be gathered from the publications of Mr. Thomson and Mr. Baynes. The characteristics of each may be given in the words of their respective authors. Mr. De Morgan, in his preface, calls the attention of his readers to the following points.

“In the form of the proposition, the copula is made as abstract as the terms: or is considered as obeying only those conditions which are necessary to inference.

“Every name is treated in connection with its *contrary* or *contradictory* name; the distinction between these words not being made, and others supplied in consequence. Eight really separable forms of predication are thus obtained between any two names: the eight of the common system amounting only to six, when, as throughout my work, the two forms of a convertible proposition are considered as identical.

“The complex proposition is introduced, consisting in the co-existence of two simple ones. The theory of the syllogism of

complex propositions is made to precede that of the simple or ordinary syllogism; which last is deduced from it.

“The theory of the numerical syllogism is investigated, in which, upon the hypothesis of numerical quantity in both terms of every proposition, a numerical inference is made.

“The old doctrine of modals is made to give place to the numerical theory of probability.”

Sir William Hamilton has issued a prospectus of his intended *New Analytic of Logical Forms*, in which its most important features are described as follows:—

“In the *first* place, in the essay there will be shown, that the syllogism proceeds, not as has hitherto, virtually at least, been taught, in one, but in the *two* correlative and counter *wholes* (Metaphysical) of *Comprehension*, and (Logical) of *Extension*; the major premise in the one whole being the minor premise in the other, &c.

“In the *second* place, the self-evident truth,—that we can only rationally deal with what we already understand, determines the simple logical postulate,—*To state explicitly what is thought implicitly*. From the consistent application of this postulate, on which Logic ever insists, but which Logicians have never fairly obeyed, it follows:—that, logically, we ought to take into account the *quantity*, always understood in thought, but usually, and for manifest reasons, elided in its expression, not only of the *subject*, but also of the *predicate*, of a judgment.”

The doctrine of a *quantified predicate*, and its influence on the *forms of the syllogism*, may be selected as the most important feature in both systems, as well on its own account as on that of the controversy which has taken place concerning the authorship. Into that controversy we have no intention of entering; especially as we are convinced that the two systems are not only distinct from, but opposed to each other.* The opposition is clearly marked in Sir William Hamilton’s own words.

* One doctrine indeed is common to both systems,—that of the ultra-total quantification of the middle term; and in this there can be no question that neither author is indebted to the other. But Mr. De Morgan goes rather too far when he asserts that a person kept close to Aristotle’s forms could not prove that some men must have both coats and waistcoats, if a majority have coats and a majority waistcoats. The proof would indeed be condemned by Aristotle’s *rules*, but it may be admitted without violating his *principles*. For Aristotle does not, like many of his successors, regard the 2d and 3d figures as independent forms of reasoning, but considers their validity to be dependent on their reducibility to the first. Mr. De Morgan’s syllogism is in the *third* figure, and may easily be brought to the Aristotelian type by a *reductio per impossibile*. It therefore stands on the same footing with a syllogism in Bokardo, as *imperfect* but *perfectible*. But we agree with Sir W. Hamilton in regarding this quantification as authentic, but of little use in practice, and cumbering the science with a superfluous mass of moods.

“ We have simply to consider, in their contrasts, the three following schemes of quantification.

“ The *first* scheme is that which logically confines all expressed quantity to the *subject*, presuming the *predicate* to be taken,—in *negative* propositions, always determinately in its *greatest* and *least* extension, (universally and singularly,)—in *affirmative* propositions, always indeterminately in *some part* of its extension, (particularly.)

“ The *second* scheme is that which logically extends the expression of quantity to *both* the propositional terms, and allows the *predicate* to be of *any quantity* in propositions of *either quality*.

“ The *third* scheme is that which logically admits *more expressed quantities* than a determinately least or greatest extension, (quantity singular and universal,) and an indeterminately partial extension, (quantity particular.)”

The second of these is Sir William Hamilton's; the third is Mr. De Morgan's. The latter is the more ambitious of the two, and makes more formidable inroads upon the established boundaries of Logic. It is incumbent, therefore, on those who take an interest in the progress of the science, to scrutinize narrowly its pretensions; and if, in endeavouring to fulfil this duty, we find it necessary to express our dissent from the principles of the acute and learned author, we trust that we shall not be considered as feeling anything but the highest respect for the ability which he has in many ways displayed, and which indeed renders the task of opposing him more obligatory, as well as more difficult. Mr. De Morgan's great eminence as a mathematician makes it necessary for every student of Logic to see that he does not mar its doctrines by spurious importations from his favourite science; while the acuteness and ingenuity of many of his logical details render still more imperative the duty of detecting the unsoundness, if any exists, of his principles. It has been said that, next to him who forms the taste of a country, the greatest genius is he who corrupts it. If Mr. De Morgan should rank with posterity as one who corrupted Logic with mathematics, he need not be ashamed of his partners in the offence; for he will find among them Bacon, who corrupted it with physics, and Hegel, who corrupted it with metaphysics.

The main point at issue between us may be stated in a few words. Mr. De Morgan regards the processes of arithmetic and algebra as exhibiting the pure form of reasoning, and, consequently, as belonging to the *Logica docens*. We consider all mathematical operations, so far as they contain reasonings at all, to be special applications of reasoning to a particular matter, and as such to belong to the *Logica utens*. His system, fully carried

out, would make logic an application of mathematics: we hold mathematical, in the same manner as any other reasoning, to be an application of logic. Our difference is thus fundamental. We believe that there is no tenable principle of distinction between the matter and the form of thought which will not make the greater part of his "Formal Logic" material. But that the controversy may not become a dispute of words only, we will endeavour at the outset to lay down clearly our own view of the distinction in question—a step the more necessary, inasmuch as we are acquainted with no work on Logic in which the principle is clearly enunciated, though in most, as far as they are consistent with themselves, it is implied. If Mr. De Morgan dissent, as he probably will, from our principle, he must state his own, and the public (that portion of it at least which takes an interest in Logic) must decide between us.*

Thinking, the operation of the understanding, may be defined as the act of knowing or judging of things by means of concepts. In the extended sense in which psychology employs the term, every act of consciousness is a *judgment*, inasmuch as it contains an assertion of the existence of its object within or without the conscious mind. The *concept* forms the distinguishing feature of thought. Perception, like any other *immediate* act of consciousness, has two constituent elements—the perceiving subject and the object perceived, the hypothesis of a representative idea being rejected. Thought, as a *mediate* act of consciousness, requires at least three elements—the thinking subject, the object about which he thinks, and the concept mediating between the two.†

Preliminary to every act of Thought is an act of Will, *attention*, in which the mind contemplates exclusively a certain number of the attributes given in an intuition to the neglect of the rest.

* Though we have selected Mr. De Morgan as the principal offender, the principles here advanced are in many respects applicable to some other able works, which we have not space to notice in detail. To this class belong Boole's *Mathematical Analysis of Logic*, Solly's *Syllabus of Logic*, and a portion of the mathematical appendix to Drobisch's valuable *Neue Darstellung der Logik*. All, we think, are guilty of one fundamental error. They represent thought as a species of algebra, instead of regarding algebra as a species of thought.

† The reader of Kant will recognise in the following remarks much of the *Kritik der reinen Vernunft*. But while acknowledging our great obligations to this philosopher, we think it necessary to state *in limine* that we have departed from his theory in two important particulars,—1. In regarding all consciousness, immediate as well as mediate, as a *judgment*; 2. In introducing the voluntary element of *attention*, an element neglected by the Kantian as well as by the sensational school, and only fully appreciated since the reaction against the latter, commencing with the lectures of Laromiguière. Nor do we observe Kant's distinction between Understanding and Reason in Logic; the former term we employ to denote the whole thinking faculty.

By thought these attributes are regarded in their relation to objects. Of the three acts of thought commonly distinguished by logicians,—Conception, or simple Apprehension, regards a single collection of attributes as representing one or more objects; Judgment (in the more limited or logical sense of the term) regards two such collections as related to one or more common objects; Reasoning regards two judgments as so related, through a common concept and its objects, as to necessitate a third judgment in consequence.

In the product of every one of these operations we may distinguish between *matter* and *form*. The former is all that is given out of the thinking act; the latter is all that is conveyed in and through the act itself. To conception are *given* attributes; to judgment are *given* concepts; to reasoning are *given* judgments. These constitute the *matter* of the respective products. By the act of conceiving, the attributes are *thought* as representing one or more objects; by the act of judging, the concepts are *thought* as related to one or more common objects; by the act of reasoning, the judgments are *thought* as necessitating another judgment in consequence. These three features constitute the *form* of the respective products. Hence we define the several products as follows:—

A concept is an attribute, or collection of attributes, (*matter*), representing one or more objects, (*form*).

A judgment is a combination of two concepts, (*matter*), related to one or more common objects, (*form*).

A reasoning (syllogism) is a combination of two judgments, (*matter*), necessitating a third judgment as their consequence, (*form*).

The thinking process itself may also be distinguished as *material* or *formal*. It is *formal* when the *matter given* is sufficient for the completion of the product, without any other addition than what is communicated in the act of thought itself. It is *material* when the data are insufficient, and the mind has consequently to go out of the thinking act to obtain additional materials. If, for example, having *given* the attributes A, B, C, I can think those attributes as co-existing in an object, without appealing to experience to discover what objects actually possess them, this is *formal conceiving*. If, having *given* the concepts, P and Q, I can pronounce “P is Q” without a similar appeal, this is *formal judging*. If, having *given* the judgments, “W is X,” “Y is Z,” I can elicit a conclusion from them alone, this is *formal reasoning*. Experience is here used in a wide sense, for all accidental knowledge, all that is not part and parcel of the thinking act itself.

The condition of formal conceiving is that the attributes given must not contradict each other. There is no contradiction be-

tween the notions of a horse's body and a man's head. A centaur, therefore, is as *conceivable* as a horse or a man, whether such a creature exist in nature or not. But let us try to conceive a surface both black and white, or a figure contained by two straight lines; the attempt to individualize the attributes by applying them to an object shews their incompatibility. Hence the law of thought governing formal conceiving is, What is contradictory is inconceivable, what is not contradictory is conceivable. Here we have the well known principle of contradiction, the most general statement of which is, "nothing can be A and not A," or, "no object can be *thought* under contradictory attributes." But for material conceiving more than this is required. The senses must assure me of the existence of the objects, before I can think of horse or centaur as actually existing out of my imagination. This assurance is not the result of a law of thought, but of a fact of perception; hence, as a general rule, all imaginary objects are conceived as such formally; all real objects are conceived as such materially.

Formal judging is possible whenever one of the given concepts is contained in the other. If the concepts P and Q have no attributes in common, I cannot tell whether they co-exist in any object without an appeal to experience; but if Q contains the attributes of P, I can by a law of thought alone determine "all Q is P." The law in this case is the principle of identity, of which the most general statement is, "every A is A," or, "every concept is identical with itself." A negative judgment may in like manner be formed by means of the principle of contradiction, when the attributes in the two concepts are contradictory. Hence, as a general rule, all analytical judging is formal; all synthetical judging is material.

The wording of the above remarks has been adapted to categorical judgments; but hypothetical and disjunctive judgments are also sometimes analytical, and the result of a formal process. For example,—if having given the judgments, "A is B, C is D," I can form solely by a law of thought without experience the judgment "if A is B, C is D," the process is formal. This I can do when the concepts are *given* as standing in the relation of operating cause and resulting effect. Again, from the terms A, B, and C, if the two last are *given* as contradictory, I can form the analytical judgment, "A is either B or C, (not B.)" In other cases I must ascertain the fact from experience. Here we have two additional laws of thought, the one—if a cause exist, its effect exists likewise;* the other, the principle of ex-

* This, with its converse from the non-existence of the effect to the non-existence of the cause, may be called the principle of cause and effect, or of reason and con-

cluded middle, which, of two contradictory judgments, compels us to think one as true.

Formal reasoning is possible when the given propositions are connected by a middle term, under such conditions of quantity and quality that the mere act of thought necessarily elicits the conclusion. If any addition to the data is required, the consequence is material. Purely formal reasoning is dependent on the same laws as formal judgment—the law of identity governing the affirmative categorical syllogism, the law of contradiction the negative, the law of cause and effect the hypothetical, and the law of excluded middle the disjunctive. A single example must suffice. In a syllogism in Barbara we reason in this form,—“All A is [some] B, all C is [some] A;* therefore all C is [some] B.” The law which determines the conclusion is, that whatever is identical with a portion of A is identical with a portion of that which is identical with all A. Here is again the principle of identity—“Every portion of a concept is identical with itself.” The other forms of syllogism may easily be analysed in the same manner.

But whether the thinking process is formal or material, *i.e.*, whether the necessary data are given to the thinker, or have to be sought by him in addition to the act of thought, the resulting product possesses in every case a matter and a form, the former being given *to*, the latter being given *by*, the thinking act. We must necessarily be brief, and can therefore point out only one or two applications of the principle; but the latter being once clearly laid down, it will be easy to supply the rest.

We select then, as an important instance, the distinction of matter and form in a synthetical judgment gained from perception. I see an extended surface, which I am accustomed to call a table. I press my hand on it, and it resists; I judge in consequence “the table is hard.” The judgment is material—for I

sequence, but must not be confounded with the principle of sufficient reason, which is *synthetical*, and leads to material judgments. The two are distinguished by M. Royer-Collard, who adopts an illustration of Hume's:—“*Point d'effet sans cause est la même chose que point de mari sans femme; de ce qu'il n'y a point de mari sans femme, il ne suit pas qu'il n'y ait point d'homme qui ne soit mari; de même quand on dit, point d'effet sans cause, on ne dit pas que tout ce qui arrive soit un effet et soit produit par une cause.*” But this eminent philosopher, when he spoke thus disparagingly of identical judgments, did not anticipate the conclusion to which our present remarks are tending, *viz.*, *that from the constitution of the human mind, every law of pure thinking must be an identical judgment.* If this can be shewn psychologically, what has hitherto been considered as the reproach of logic becomes her glory.

* We have quantified the predicate, thus far anticipating our judgment of Sir William Hamilton's system. But in this we only express what every treatise on Logic tells us to understand, *viz.*, that the predicate of an affirmative proposition is not distributed, *i.e.*, is *particular*.

could not have formed it merely from the concepts; but I have now got an additional datum—the senses have informed me of the co-existence of the attributes. But this is not all that is needed for the judgment. The extended surface which I see is not identical with the hardness which I feel. The identity is in an imperceptible something, to which I am compelled to consider both as belonging. The visible and tangible qualities are by an act of thought attributed to one invisible and intangible subject. Here is a *form* of the judgment, expressed in language by the copula; the table *is* hard.*

I hold a piece of wax to the fire, and it begins to melt. My senses inform me only of two successive phenomena, the proximity of the fire, and the melting of the wax. That the one is the *cause* of the other, is an addition to the sensible data produced by the act of thought. The matter of the judgment is here given in the successive phenomena, “the fire is applied, the wax melts:” the form is given by the mind, which is compelled to assert a causal relation between them. This relation is expressed by the conjunction; “If the fire is applied, the wax melts.” But this is not all. I see the wax in a liquid state; I remember that just now it was solid. Here, again, my senses only present to me two distinct phenomena. To pronounce that these belong to the same thing, that it is *the wax* which was solid and is liquid, I must believe in the continuous existence of the subject, notwithstanding the changes in its sensible appearance. This again is the result of an act of thought; and hence arises the disjunctive judgment. Its matter is given in the phenomena, “wax is solid, wax is liquid.” Its form arises from the identification of the two, “the wax is solid *or* liquid.” Thus we have three synthetical laws of mind, producing forms of material thinking. Qualities suppose a subject; changes suppose a cause; things continue to exist under changes of phenomena.†

Hitherto we have treated of singular judgments only. A single instance must suffice to shew that the principle is applicable to common judgments also. I see a number of balls lying on a table; and I pronounce, “all those balls are white.” I see another collection, and pronounce with the same readiness,

* Mr. De Morgan asserts that “historically speaking, the copula has been material to this day.” We admit that logicians have often fallen into errors and inconsistencies in this respect. But the true logical copula we believe to be in all cases an assertion of identity or distinctness, and as such, a *form* of the judgment. Mr. De Morgan’s spurious copulas, such as “gives,” “brings,” “makes,” &c., all arise from the neglect of this principle. When I assert “A gives B,” I mean that the attribute of giving B is found in the same subject with the attributes forming the concept A.

† Into the metaphysical discussions connected with these laws it would exceed our limits and our design to enter. For logical purposes it is sufficient that the common language and common thought of mankind universally acknowledge them.

“some of those balls are black.” Here the senses present only individual objects. *This, this, and this* are within their province; they know nothing of *all* or *some*. It is by an act of thinking that the several individuals are regarded as constituting a whole, and a judgment pronounced concerning that whole or a portion of it.*

The above are only a few of the most obvious applications of the principle under discussion. Its general results may be briefly stated as follows:—All formal thinking is governed by laws which may be expressed in analytical judgments. All material thinking is governed by laws which may be expressed in synthetical judgments. The former are sufficient of themselves for an act of thought, operating only on that matter which is given, and which ultimately appears in the result. The latter are insufficient without calling in the aid of experience, thus requiring additional matter which does not appear in the result. The former are uniform in their operation, and can therefore completely guarantee the validity of the thought. The latter are modified in their operation by their combination with experience, and can therefore only partially guarantee the validity of one element of the thought. Hence the former may be described as *pure, adequate, or positive* laws of formal thinking; the latter may be described as *mixed, inadequate, or negative* laws of material thinking.

When, then, Logic is defined as the science of the laws of formal thinking, or as the science of the laws of thought as thought, (not as modified by experience,) it follows that it can adequately determine the *conceivability* of an object, the truth of an *identical* or *analytical* judgment, the consequence of a *formal* reasoning. It cannot determine the *real existence* of an object, the truth of a

* The fourth Kantian form of judgment, modality, has given rise to considerable dispute among logicians. The question of its admission or exclusion as a *form* depends, on the above principles, on a question of psychological fact. Do we in forming a necessary judgment decide that the object thought under the concept A *must be* identical with that thought under B, or that it *is* identical with what on other grounds we know must be B? In other words, is modality an affection of the copula, or of the predicate? We believe that a distinction of modals may be admitted on purely logical principles: whether it is worth admitting is another question. Thus, necessary judgments are such as by the laws of thought alone we are compelled to make; impossible, such as by the same laws we are forbidden to make; all others are contingent: all identical judgments are logically necessary; all contradictory judgments are logically impossible; all synthetical judgments are logically contingent. If my conception of man does not include the attribute of mortality, man may, as far as logic is concerned, be mortal or not. I must appeal to experience to decide whether the Struldbrugs of Luggnagg are realities or fictions. For aught I know *as a logician*, a triangle may have more or less than two right angles. Geometry must decide whether this is materially possible or not. But if any distinction be admitted, the modality must be *expressed* in the copula, not *understood*.

synthetical judgment, the consequence of a *material* reasoning ; for in these cases thought can only operate in conjunction with an act of perception or memory ; and the laws of the former are no security for the trust-worthiness of the latter. It is of course open to any innovator to attempt to extend the boundaries of the science ; but he does so in the teeth of Kant's demonstration that a criterion of material truth is not only impossible, but self-contradictory. In attempting to enlarge the field of Logic, he only makes it impossible to assign to it any definite field whatever. If a single intruder is admitted from the province of material knowledge, no barrier can be devised which shall not with the same facility give access to all.

One more remark may close this part of our subject. In maintaining the whole of formal thinking to depend on identical, or to use the language of Kant, on analytical judgments, we must be prepared to meet the charge of "empty tautology," of "solemn trifling," and such like hard names, which have been unsparingly heaped by modern authorities upon this unfortunate class of judgments. The whole charge rests on a confusion between Laws of Thought and Laws of Things, between laws under which the subject must think, and laws under which the object must operate,—in short, between the positive and negative poles of speculative philosophy, the *ego* and the *non ego*. If (as Kant has clearly shewn) the understanding, in the strict meaning of the word, has a discursive power only, not an intuitive, and if, as he has also shewn, it is by intuition alone that synthetical judgments can be obtained, it follows that no judgment of this class can possibly rank as a pure law of thought. Every new truth is the discovery of the special attributes of special things, and, as such, arises from the observation of differences : every general law of thinking must be indifferently applicable to all objects, and, as such, must be independent of differences. It is optional, and therefore contingent to every man, whether he shall think about this or that particular object ; the laws therefore of any branch of material science are known to him only on condition of his adopting that line of study. But if all men have been thinking, some on this matter, some on that, but all *under one code of laws*, what marvel if, when their attention is called to those laws, they should recognise them as what they have all along unconsciously acknowledged ? Herein lies at once the explanation and the justification of the supposed frivolities of logic. If its principles were synthetical, and therefore derived from intuition, it might rank with Optics or Astronomy, as a science of certain laws of material agents ; or it might aspire to the character of a general Cosmology, to which these and other branches of physical study might be subordinate ; but it could

not pretend to exhibit the general laws which, independently of all special experience, the *thinking subject* must obey. Surely, in the name of common sense and common honesty, never was outcry more palpably absurd than that which finds fault with a science for accomplishing the very purpose which it professes to attempt, and for exhibiting the very features which, if its pretensions are well founded, and its method sound, it necessarily must exhibit.

It is true that the laws of formal thinking may become futile when they are employed as the sole agents for attaining material truth; but the fault lies not in the laws, but in their misapplication. It is the lot of the intellectual, no less than of the physical man, to derive his sustenance from without, his digestion from within; he cannot make the same organ both obsonatory and peristaltic. If he will not confine his understanding to its proper office of *concocting the matter given by intuition*, it is as natural and proper for him to fall into barren subtleties, as it is for him to perish of inanition, if he perversely employs his gastric juice in feeding on the coats of his own stomach.

The above considerations apply to the laws of thought in a logical point of view, in relation to the acts which they govern. But psychologically considered, in their relation to the mind and its faculties, the examination of them furnishes us with an important special truth, the discovery, namely, to which we have before alluded, that the understanding in itself possesses no power of intuition.* If any one regards this discovery as trifling, he is refuted by the whole history of philosophy. It was by establishing this truth that Kant annihilated at a single blow all the fruitless speculations of the elder metaphysic: it is the influence of the same discovery which has determined the whole course of cognate speculations since that time, and has driven their authors to the candid and instructive confession that a knowledge of the absolute must be sought, not in accordance with, but in defiance of the laws of thought. It may be humiliating to know that man's powers are thus restricted; but the restriction is one which his Maker has thought fit to impose upon him, and, regret it as he may, he cannot escape from it. But so far is logic from being thereby convicted of frivolity, that it becomes the greatest possible safeguard against frivolous speculation, by shewing clearly the nature of the pure laws of the

* In denying a power of intuition to the pure understanding or logical faculty, we do not insist on the adoption of the Kantian division of the mental powers, nor do we assert that the whole *matter* of knowledge is derived from sensation. We mean only that the act of thought, as mediate and representative, must be rested on an immediate and presentative fact of consciousness. This important principle, as thus explained, is not more connected with Kant's psychology than with Herbart's.

understanding, and the exact limits within which they are operative.

“Tecum habita, et noris, quam sit tibi curta supellex.”

Up to this point we have necessarily been somewhat prolix ; but our principles being once stated, their application to the works before us will not be difficult. The title of Mr. De Morgan's book appears to us a complete misnomer. Under the name of *Formal Logic* he presents us with sundry perversions of the syllogistic form, designed to admit purely material reasonings. It does not seem as if the author had ever asked himself the preliminary question,—What constitutes the matter of thought, and what the form ? His opening paragraph contains a clear and accurate statement of the nature and boundaries of logic, which his whole subsequent treatment seems expressly designed to refute. No logician will find fault with the following :—

“ It (logic) has so far nothing to do with the truth of the facts, opinions, or presumptions from which an inference is derived ; but simply takes care that the inference shall certainly be true if the premises be true. . . . Whether the premises be true or false, is not a question of logic, but of morals, philosophy, history, [may we not add mathematics ?] or any other knowledge to which their subject-matter belongs : the question of logic is, does the conclusion certainly follow if the premises be true ?”—*Formal Logic*, p. 1.

What, then, shall we say to the following ?—

“ Observing that every inference was frequently declared to be reducible to syllogism, with no exception unless in the case of mere transformation, as in the deduction of ‘ No X is Y ’ from ‘ No Y is X,’ I gave a challenge in my work on formal logic to deduce syllogistically from ‘ every man is an animal ’ that ‘ every head of a man is the head of an animal.’ From the total absence of attempt to answer this challenge, I conclude that no one has succeeded in whose way it has fallen.”—*Transactions*, p. 9.

Now, either Mr. De Morgan regards this reasoning as material or as formal. If the former, what business has it in a work on formal logic ? If the latter, we beg, in answer to his challenge, to propose the following reasoning, of precisely the same form :—A guinea-pig is an animal ; therefore, the tail of a guinea-pig is the tail of an animal. But, says our logician, guinea-pigs have no tails. Who told him that ? Is it logic or natural history ? Is it the science of inference in general, or the knowledge to which the subject-matter belongs ? We reply to Mr. De Morgan's challenge, by denying that the supposed inference is formally any reasoning at all. From the mere pre-

mise, "Every man is an animal," it does not follow that there is such a thing as a man's head in existence. We go out of the act of thought to obtain that information elsewhere. The consequence is therefore a special inference, *gained from our material knowledge of the thing thought about*, not a general inference *necessitated by the universal laws of thinking*.*

A similar confusion appears in his account of the copula. He lays down, in a passage which our limits do not permit us to quote at length, the characteristics of the word *is*, which, existing in any proposed meaning of it, make that meaning satisfy the requirements of the logicians when they lay down the proposition *A is B*. For this doctrine we must refer the reader to his *Formal Logic*, (p. 49.) We have only space for the ultimate result :—

"It should be noted that the copula 'gives' resembles 'is greater than,' and is an admissible copula in inferences with no conversion, provided that 'A gives B and B gives C,' implies 'A gives C.' The same may be said of the verbs to bring, to make, to lift, &c. And many of these verbs are, by the unseen operation of their having the effect of *is* in inference, often supplanted by the latter verb in phraseology. Thus we say 'murder *is* death to the perpetrator' where the copula is *brings*; 'two and two *are* four,' the copula being 'have the value of,' &c. But this practice may lead to fallacies, as above shown: which must be avoided by attention to the class of verbs which communicate their action or state, such as make, give, bring, lift, draw, rule, hold, &c. &c. All these verbs are applied to denote the cause of the several actions: so, to give that which gives, or to bring that which brings, is to give or to bring. The boy who was said to rule the Greeks because he ruled his mother, who ruled Alcibiades, who ruled the Athenians, who ruled the Greeks, would have been correctly said so to do, if the matters of rule had been the same throughout."—*Formal Logic*, p. 268.

We presume Mr. De Morgan would not admit as valid reasoning the fallacy instanced by Hobbes,—“The hand touches the pen, the pen touches the paper; therefore the hand touches

* The following passage from Wolf's German Logic will shew that this supposed inference has not been accidentally neglected, but intentionally and rightly repudiated by men who accepted the Aristotelian forms. We cite from the English translation published in 1770, which has been described by Sir W. Hamilton as one of the few tolerable versions we have of German philosophical works.

“We sometimes seem to draw a conclusion from a single premiss, which manner of reasoning is called *an immediate consequence*. As if I say, 'A triangle is a figure; therefore, whoever describes a triangle describes a figure.' Here it should seem as if I immediately drew one proposition from another. But it is evident that the one of these propositions alone cannot possibly lead me to the other. For that purpose it would be necessary the first should directly excite the second in my mind: but that is by no means the case.”—P. 106.

the paper." Still less would he allow us to reason, "Paris killed Achilles, Achilles killed Hector; therefore, Paris killed Hector." But how do these examples differ *in form* from "A gives B, B gives C; therefore, A gives C?" He will tell us that the verb "gives" communicates its action, the verbs "touch" and "kill" do not. But is this knowledge formal or material? Is it derived from the general laws of all thinking, or from a special knowledge of the nature of the actions denoted by the several verbs? If thinking about giving is a different *form* of thought from thinking about killing, there is an end of all general laws of reasoning. The nature of the object thought of must, in all cases, determine the inference. But his fundamental principle is erroneous. The copula, so far as it represents a form of thought, is not ambiguous. Its material misapplications are nothing to the purpose, unless one blunder authorizes another. When Mr. De Morgan speaks of the various meanings of *is*, as applied to names, ideas, and objects, he forgets that, in all actual thinking, name, idea, and object are combined. We think of an object, under a concept, which is represented by a sign. When I say "man is an animal," I can mean but one thing, the identity of one at least of the objects thought under each concept. Make the name or the concept itself an object of thought, and the supposed *is* of application or possession expresses a mere falsehood,—“the name man is the name animal.” The copula always applies to the object of thought, in that application has but one meaning, and without an object there is no thinking at all.

But we must hasten on to the head and front of his offending, the *numerically definite syllogism*; as we believe that the question of the author's merits as a logician mainly turns on the legitimacy of this supposed addition to the Aristotelian forms.

“The ordinary universal propositions,” says Mr. De Morgan, “are of a certain approach to definite character, both of them with respect to their subjects, and the negative one with respect to its predicate also. In $X)Y$ [every X is Y], for example, what is known is as much known of any one X as of any other. Perfect definiteness would consist in a more exact degree of description, and would require a higher degree of knowledge. But in this chapter I speak only of *numerical* definiteness, of the supposition that we know *how many* things we are talking about. We may be well content to examine what we should do if we were a step or two higher in the scale of creation, if by so doing we can manage to add something to our methods of inference in the highest to which we have as yet attained.

“A numerically definite proposition is of this kind. Suppose the whole number of X s and Y s to be known: say there are 100 X s and 200 Y s in existence. Then an affirmative proposition of the sort in question is seen in ‘45 X s (or more) are each of them one of 70

Ys:' and a negative proposition in '45 Xs (or more) are no one of them to be found among 70 Ys.'

"Taking X, Y, Z as the terms of the syllogism, ξ the number of Xs in existence, η the number of Ys, and ζ the number of Zs, and ν the number of instances in the universe, there are of course sixteen possible cases of knowledge, more or less, of these primary quantities, from all unknown to all known. Of these sixteen cases it will be requisite to consider two only. First, when the extent η of the middle term is known, and all the rest unknown; secondly, when all are known. The *algebraical* formulæ of the latter case will enable us to point out how the supposition of any less degree of knowledge would affect our power of inference.

"I propose the following notation. Let mXY denote either of the equivalent propositions, that m Xs are to be found among the Ys, or that m Ys are to be found among the Xs. Let $mX:nY$ denote either of the equivalent propositions, that there are m Xs which are not any one among n Ys, or n Ys which are not any one among m Xs.

"Let η be known, and η only of the four, ν , ξ , η , ζ Let us first consider the premises $mXY+nYZ$. They tell us that among the η Ys we find m Xs and n Zs: accordingly, neither m nor n exceeds η . If m and n together fall short of η , nothing can be inferred: Y is extensive enough (that is, there are instances enough of Y) to hold the m Xs and the n Zs without any coincidence of an X with a Z. . . . But if m and n together exceed η , it is impossible that m Xs and n Zs can find place among η Ys, except by putting either two Xs or two Zs, or an X and a Z, with *one* of the Ys. Now, as by the nature of the supposition, there cannot be two Xs, nor two Zs, to one Y, we must have the inference $1XZ$ as often as there are units in the excess of $m+n$ over η . That is,

$$mXY+nYZ=(m+n-\eta) XZ."$$

—*Formal Logic*, pp. 141, 143, 145.

For the benefit of those who are not familiar with algebra, we will take a single numerical instance of the above theory, and translate it into the ordinary notation. In so doing we do no injustice to the author; for his general principle is obviously admissible only if all its special applications are so. We will suppose $\eta = 21$, $m = 18$, $n = 15$. Mr. De Morgan then holds the following to be a formal syllogism:—

18 out of 21 Ys are Xs.
15 out of 21 Ys are Zs.
∴ 12 Zs are Xs.

Of course no one denies a reasoning of this kind to be valid. The question is, is it valid in consequence of its form or of its matter? Is the conclusion such as I am by the laws of thought compelled to draw from the premises; or does it in any degree depend on the accidental circumstance of my possessing addi-

tional information not given in the premises? In the latter case the consequence is material, and the additional knowledge in question must be given as a new premise before it can become formal.

In examining whether any process is logical or not, we are at liberty to suppose in the logician any amount of ignorance out of the province of his own science. It signifies nothing whether the matters ignored are easy or difficult, common to nearly all men, or known only to a few; it is sufficient if they are not known *as parts of logic*. No man can make the above inference without the previous knowledge that $33 - 21 = 12$. Does he derive this knowledge from logic or from arithmetic? In the latter case the consequence is not formal but material. It is no answer to say that this knowledge is possessed by all civilized men. The question is, do they possess it *as logicians*? There is no middle course between relieving the logician, as such, from all material knowledge whatever, and compelling him to be conversant with all. Once concede that as a logician he is bound to know that two and two make four, and there is no art or science, knowledge or device, under the sun, a proficiency in which may not with equal justice be required of him.

It is evident, therefore, that Mr. De Morgan's whole case rests on his being able to shew that all propositions gained by addition or subtraction are laws of thought, known to men not specially as arithmeticians, but generally as thinkers. We do not say that he cannot maintain this, but we can adduce sufficient authority to make it incumbent on him to undertake the burden of proof, and not, as now, tacitly to assume a controvertible point. We have already stated our own belief that all laws of formal thinking are analytical judgments; whereas arithmetical propositions, since the days of Kant, have been generally admitted to be synthetic.* We do not know Mr. De Morgan's opinion on this point, but we do not see how he is to escape from the following dilemma:—either he must maintain that synthetic judgments may be laws of formal thinking, in which case he is bound to prove against Kant that the understanding has a power of intuition; or he must hold that arithmetical judgments are analytical, in which case he must be prepared to refute Leibnitz's logical demonstration that two and two make four.† For it is equally fatal to his cause whether he concede to Kant, that arithmetical judgments are intuitive, or whether he concede to Leibnitz, that they are demonstrable by the old form of syllogism, not the basis of a new one.

* Hegel on this point differs from Kant, but his reasoning is anything but satisfactory.

† Kritik der reinen Vernunft, Transc. Anal., b. i. Hauptst. 2. Abschn. i. § 17. Prolegomena, § 2, and Nouv. Essais, l. iv. ch. 7.

We hold with Kant that arithmetical numbers, like geometrical figures, are the result of an intuition, and as such, furnish not forms of thought, but objects about which we think. The judgments of addition, as that two and two make four, are no more gained by a reasoning process than the knowledge that snow is white; but, once gained, they may, like any other judgments, form premises in a syllogism. The numerical reasoning given above is, as it stands, elliptical and material; it may be made formal by supplying a defective premise, thus:—

The difference between 33 and 21 is 12.

The number of Zs that are Xs is the difference between 33 and 21.

Therefore the number of Zs that are Xs is 12.

The minor premise in this syllogism is a combination of Mr. De Morgan's two, precisely as in the logical analysis of geometrical reasonings, the premise "A and C are equal to B," combines "A is equal to B, and B is equal to C." The major premise is an addition absolutely necessary to the conclusion, but derived not from logic, but from arithmetic. Without this addition, the reasoning must be regarded as material.

As we do not consider arithmetical processes to be formal reasonings, so we do not regard arithmetical data as pure forms of the judgment. There is no law of mind which compels me, on seeing a number of balls on a table, to pronounce at once how many are black and how many white. I must proceed to the deliberate operation of counting. If two persons count and arrive at different results, I cannot decide between them by the laws of thought. I can only make them repeat the operation till the results coincide; and even then both may possibly be wrong. Now, is counting an appeal to facts as given in the intuition, or to a law of the mind in thinking? By every such law we are compelled to add something to the intuition, to think more than is given. But there is no law by which I am compelled to think of a number of balls as 70 rather than 69 or 71. The question is one of a more or less accurate examination of facts; and that examination must be completed before I begin to think of them under this notion of number or that. To refer to a law of the understanding to decide a matter belonging to intuition, is analogous to the celebrated problem, "given the latitude and longitude of a ship at sea, to find the name of the captain."

Mr. De Morgan's chief error arises from his having overlooked the fact, that *the form of intuition becomes the matter of thought*. All formal judgments are necessary; but it by no means follows that all necessary judgments are formal. When Kant shewed that all mathematical judgments are synthetical, he shewed at

the same time that they could not possibly be produced by the laws of thought alone. We may turn and analyse as we please the notions of 7 and 5 ; we cannot, by mere thinking, determine 12 to be their sum ; as from the mere notion of two straight lines we cannot determine that they do not inclose a space. It is true that the intuitions which we call in aid for these judgments are dependent, not on the accidental presentations of this or that act of perception, but on the essential conditions of sensibility in general ; and to this is owing the necessity of mathematical judgments, as thoughts, if not as truths ; but it is nevertheless true that the constructed object of intuition is given *to*, not *by*, the judgment, and in accordance with laws distinct from those of general thinking.*

The above remarks are also applicable to another of Mr. De Morgan's innovations, the substitution of the numerical theory of probability in the place of the old modality. If all arithmetical and algebraical processes are extralogical, the theory of probabilities is of course excluded along with every other application of the calculus. Of the value of Mr. De Morgan's speculations, in a mathematical point of view, we are fully sensible ; and had our task been to estimate his merits in that department, our judgment would have been very different from that which, relatively to logic, we find ourselves reluctantly compelled to give.

We have only space to notice one other feature of Mr. De Morgan's system, and that briefly. We allude to his treatment of every name "in connexion with its contrary or contradictory name." He commences by assuming that "every negative proposition is affirmative, and every affirmative proposition is negative."† From this principle we have already virtually expressed our dissent. We have endeavoured to shew that negation is not an affection of the predicate, but of the copula ; that we do not pronounce in judgment on the identity of the objects thought under the concepts A, and not-B, but on the distinctness of those thought under A and B. Negation is thus not the

* Something of the same confusion may be observed in the language of a writer whose just and philosophical views of science in general make it the more necessary to notice his occasional inaccuracies, and whose authority may possibly have had some influence in forming Mr. De Morgan's doctrine. Dr. Whewell applies the name of Formal Sciences to the pure mathematics, as having for their object the ideas of space, time, and number ; and this, though in one sense correct as regards forms of the sensibility, is not so in that in which the same name is applicable to logic with relation to the forms of the understanding.

† Neither the principle nor the objection are new in logic. Sturm, in his *Compendium Universalium seu Metaphysicæ Euclidæ*, proposed a theory of indefinite names in many respects resembling that of Mr. De Morgan. On this Leibnitz remarks :—"Cæterum Sturmianos illos modos arbitror non formæ sed materiæ ratione concludere, quia quod termini vel finiti vel infiniti sint non ad formam propositionis seu copulam aut signum pertinet, sed ad terminos."

offspring, as Mr. De Morgan holds, of an accidental variety of language, but of an essential difference in the form of thought. But the principle becomes still more questionable, if we admit, with Mr. De Morgan, that the copula may express other relations than those of identity and difference. What, for example, is the contradictory of "A gives B?" Is it "A gives not-B?" or "A does not give B?" In the former case, the two opposed propositions, as Aristotle has long ago observed, are perfectly compatible with each other.* In the latter case, which of course is the true one, it must be admitted, either that "gives" is no copula, or that negation cannot be indifferently transferred from copula to predicate.† Nor are we better disposed to admit the author's applications of his principle. We observe the same confusion between the form of thought and the matter, between what we *must* know as logicians, and what we *may* know from other sources. For example:—

By the principle of excluded middle, we know that a concept may be affirmed or denied of any object whatever. But of this principle there are obviously three possible instances, none of which can be determined to be the true one without an appeal to our *material* knowledge. Either all A is B, or no A is B, or some A is B and some not. Mr. De Morgan assumes that we may *logically* lay down the third case as the true one.

"I always understand some one universe as being that in which all names used are wholly contained: and also (which it is very important to bear in mind) that no one name mentioned in a proposition fills this universe, or applies to everything in it. Nothing is more easy than to treat the supposition of a name being the universe as an extreme case."—*Formal Logic*, p. 55.

This extreme case, however, becomes positively inadmissible according to his subsequent doctrines. He tells us, for example, that the proposition all X is Y, contains, as a consequence, "some things are neither Xs nor Ys." This proposition, he says, "has never till now been introduced into logic;"‡—and for a very good reason, because it has no business there. Sup-

* Anal. Prior. i. 46. Mr. De Morgan, we presume, will say that, according to his characteristics of the copula, (p. 50,) whatever does not give B gives not-B. But, can any restriction be more arbitrary? And how are we to tell when the condition is fulfilled and when not?

† Since writing the above, we have seen Sir W. Hamilton's letter in the *Athenæum* of August 24, 1850, in reply to Mr. De Morgan's Cambridge Paper. Our own remarks we leave as they were, referring to that letter the reader who wishes to see the contrasts between affirmation and negation clearly and fully stated.

‡ *Formal Logic*, p. 62.

pose his own extreme case, that either X or Y alone fills the universe, and there can obviously be nothing within that universe which is neither. The consequence is therefore material, based upon what we may happen to know of the extent of X and Y. Indeed, his whole theory of a material universe, with its positive contraries, is extralogical.* It is not by logic that we learn that real and personal fill up the universe of property.

Before quitting this part of our subject, we will describe the principle of Mr. De Morgan's complex syllogism, as that part of his system which comes in some degree into rivalry with the quantified predicate of Sir W. Hamilton, which we are about to examine. When we say that the latter accomplishes all the ends attained by Mr. De Morgan, with a vast superiority in clearness and simplicity as well as in accuracy of thinking, we have said all that is necessary in the way of criticism. Mr. De Morgan refuses to quantify the predicate in a single affirmative proposition. Accordingly, the universal affirmative, all X is Y, may form part of two complex propositions, either "all X is Y, and all Y is X," or "all X is Y, and some Y is not X." Hence a syllogism in Barbara, which, in Sir W. Hamilton's system, would be expressed in the form, "all X is some Y, all Y is some Z, therefore all X is some Z," becomes in Mr. De Morgan's hands the following complex reasoning:—

All X is Y, and some Y is not X.

All Y is Z, and some Z is not Y.

Therefore all X is Z, and some Z is not X.

The reader who is desirous of further details must seek them in Mr. De Morgan's own work. Those who will take the trouble of comparing his fourth and fifth chapters with the system which we are about to describe, will, we are convinced, discover abundant grounds to justify our preference of the latter. We have followed Mr. De Morgan through a tedious journey, during which we have more than once had occasion to express our respect for his talents, and our regret at their perversion. We take leave of him in the words of an eminent logician and mathematician:—"Enimvero quæ confuse tantum cognoscuntur, ea sæpius confunduntur, ut adeo casus similes videantur quæ sunt dissimiles, et secundum ideam confusam qui agit, facile omittit quibus vel maxime fuerat opus. Atque ideo logica naturali instructus in applicatione sæpissime aberrat. Exemplo nobis sunt illi qui, in mathesi cum laude versati, methodum ma-

* As is shewn by Drobisch, *Neue Darstellung der Logik*, § 30, and by Trendelenburg, *Logische Untersuchungen*, c. ii. § 2.

thematicam extra eandem perperam applicant, etsi sibi rem acutangere videantur." *

We must now turn to the rival system of Sir William Hamilton. In referring to the works of Mr. Thomson and Mr. Baynes as containing the principal features of this system, we by no means intend to describe either of these gentlemen as mere expositors of another's doctrine. Mr. Thomson's "Outline of the Laws of Thought" is a work of much acuteness and originality; and it is due to the author to mention that the principle of a quantified predicate had been given in its most important application, that to the affirmative propositions and syllogisms, in the first edition, published in 1842, previously, we believe, to any communication of the author with Sir William Hamilton.† Mr. Baynes's essay, though principally compiled from Sir William's lectures, contains additional matter of interest to the more advanced students of Logic, in the curious and learned historical notices of the Appendix.‡ But, while acknowledging the merits of these works, we must express our regret at the delay in the publication of Sir William Hamilton's long promised "New Analytic of Logical Forms." We would remind him of Scott's censure of Coleridge for "throwing from him, as if in mere wantonness, those unfinished scraps of poetry, which, like the Torso of antiquity, defy the skill of his poetical brethren to complete them." Should any untoward circumstance ultimately deprive the philosophical world either of the New Analytic, or of the conclusion of the Supplementary Dissertations to Reid's works, it would be hard to name a loss more deeply to be regretted or more difficult to supply.

Of the two principal characteristics of Sir William Hamilton's system, the quantification of the predicate is probably the most valuable accession to the science of logical forms, which has been made since the days of Aristotle. The following passage from the Essay of Mr. Baynes exhibits at once the value of the principle and the reason of its general neglect in Logic:—

* Wolf, *Philosophia Rationalis*, Prolegomena, § 19.

† We much regret that the limits and design of the present Article prevent us from noticing more particularly some of the peculiar merits of Mr. Thomson's important work. Without committing ourselves to the whole of his details, we cordially approve of his general conception and treatment of his subject. It is only, we are convinced, as a system of truths valuable for their own sake, and not as a system of rules valuable for what they enable us to perform, that logic can ever be treated with any degree of accuracy or completeness.

‡ Mr. Baynes is also the author of an able translation of the "Port Royal Logic." It is one of several original and translated philosophical works, lately published in Edinburgh, to which, from the specimens we have seen, we heartily wish success. Another of these works is an exceedingly well executed translation of the "*Discours de la Méthode*" of Des Cartes, accompanied by an Introduction.

“Common language, as we have seen, seeks as its end to exhibit with *clearness the matter of thought*. Whatever does not contribute to this is thrown aside as worthless. Logic, on the other hand, seeks as its end *to exhibit with exactness the form of thought*. Whatever contributes to this is retained as of scientific value. All the elements which the analysis of the form of thought furnishes must be brought out to view and explicitly considered. Whatever does not belong to the form of thought must be cast aside as without the province of the science. We have seen that in thought the predicate notion of a proposition is always of a given quantity. This quantity is not expressed in common language; because, by a knowledge of, and reference to, the matter of thought, the omission is at once supplied. This procedure is, however, of course incompetent to logic. As a formal science, it knows nothing of the matter of thought; it makes no elisions; it can understand nothing; it can supply nothing; it can only recognise and deal scientifically with what is given formally. If, therefore, the predicate has always a certain quantity in thought, (and we have shown it has,) that quantity must be expressed before it can be logically taken into account, and its significance investigated. The recognition of the expressed quantity of the predicate is then as imperative in logic as the neglect of such recognition is convenient in common language; for it is plain that, unless all the elements furnished by analysis be received and considered in their relative influence and importance, the science cannot pretend to completeness. Logic, in common with all sciences, seeks perfection; but, as a formal science, it can only realize scientific perfection as it attains to formal exactness. The condition of its formal exactness is, that its analysis of the form of thought be exhaustive and complete. As soon as this is the case, synthesis may commence, and the science will emerge in its full beauty and true perfection.”—Pp. 18-20.

The doctrine, indeed, is a necessary consequence of the principles which we have laid down above. If all actual thinking consists in the recognition of the relation between a concept and its object, it follows that, as a necessary condition of thought, the exact nature of that relation must be known. If all affirmative judgments assert the identity of one or more of the objects thought under two concepts, it is indispensable to such assertion that we should know how far the identity extends. Common language and common logic both partially acknowledge the same principle. If I say “this is a rose,” common language, by the use of the indefinite article, implies the existence of other roses besides the individual in question. If the logician asserts that affirmative propositions do not distribute the predicate, he must mean, if he means anything, that the predicate is actually thought as particular. The opponents of Sir William Hamilton are thus reduced to a dilemma: either they must maintain that the predicate cannot be thought as universal; in other words, that

no two concepts can be co-extensive—a position false in fact, and, even if true, not recognisable by logic; or they must hold that we have no means of determining the quantity at all—in other words, that we are deficient in the *sine quâ non* of all actual thought. False thinking or no thinking are the sole alternatives.

Psychologically, as well as logically, we believe that Sir William Hamilton is right in maintaining “all A is all B” to be a single judgment, in opposition to Mr. De Morgan, who exhibits it in the complex form, “all A is B and all B is A;” thereby accepting the second horn of the above dilemma, since “all A is some B and all B is some A,” would be a self-contradictory assertion.* On one or two difficulties which apparently lie on the surface of the system, it would be premature to pronounce judgment before the appearance of Sir William Hamilton’s own work. Of this kind is an ingenious objection urged by Mr. De Morgan.† “Every falsehood,” he says, “which can be enunciated as a truth should be deniable within the forms of the science;” whereas the denial of “all A is all B” is the disjunctive assertion, “some A is not B or some B is not A.” The true contradictory we take to be “all A is not all B,” which, like the original proposition, may be treated *collectively* or *distributively*, i.e., as a singular or as an universal proposition. In the latter case it is compatible with one of three distinct assertions, “No A is B,” “some A is not B,” “some B is not A;” but the opponent does not commit himself to any one of the three. He denies only to the extent in which the original proposition was asserted, and no further; and hence, in proportion as the affirmation is *definite*, the negation will be *indefinite*. How far these indefinite statements, which are in fact judgments about the truth of another judgment, are entitled to a place in a logical system is a question which we leave to the consideration of Sir William Hamilton. We doubt not that this and similar questions will be satisfactorily disposed of in his work.

* A curious inconsistency may be remarked in the theory of the complex proposition, when placed in antagonism to that of the quantified predicate. I cannot assert “all A is B and all B is A,” without having thought of A and B as co-extensive, i.e., without having made the judgment “all A is all B.” If we know the quantity of the predicate we are of course entitled to state it. The complex proposition is only preferable on the supposition of our ignorance, a supposition which annihilates the complex proposition itself. If the assertion “all A is some B and all B is some A” be suicidal, is there more vitality in “all A is (I know not how much) B and all B is (I know not how much) A?” But the question, to be fully discussed, must be treated on psychological as well as logical grounds. Logic deals with the judgment as already formed; psychology inquires what is the actual process of the mind in forming it.

† *Transactions, &c.*, p. 22.

The value of Sir W. Hamilton's services to logical science in this part of his system it is scarcely possible to estimate too highly. It is, therefore, with considerable diffidence that we venture to suggest a difficulty in connexion with his other characteristic doctrine, that of the double syllogism in extension and comprehension. The following passage from Mr. Thomson's *Laws of Thought*, will at the same time furnish a concise account of the doctrine in question and exhibit the point in which we think its accuracy assailable:—

“ Upon the examination of any judgment which appears to express a simple relation between two terms, we shall find it really complex, and capable of more than one interpretation. ‘ All stones are hard,’ means in the first place that the mark, hardness, is found among the marks or attributes of all stones; and in this sense of the judgment, the predicate may be said to be contained in the subject, for a complete notion of stones contains the notion of hardness and something more. This is to read the judgment as to the intension (or comprehension) of its terms. Where it is a mere judgment of explanation, it will mean, ‘ the marks of the predicate are among *what I know to be* among the marks of the subject:’ but where it is the expression of a new step in our investigation, of an accession of knowledge, it must mean, ‘ the marks of the predicate are among *what I now find* to be the marks of the subject.’

“ Both subject and predicate, however, not only imply certain marks, but represent certain sets of objects. When we think of ‘ all stones,’ we bring before us not only the set of marks—as hardness, solidity, inorganic structure, and certain general forms—by which we know a thing to be what we call a stone, but also the class of things which have the marks, the stones themselves. And we might interpret the judgment, ‘ All stones are hard,’ to mean that ‘ The class of stones is contained in the class of hard things.’ This brings in only the extension of the two terms; according to which, in the example before us, the subject is said to be contained in the predicate. Every judgment may be interpreted from either point of view; and a right understanding of this doctrine is of great importance.”—P. 189.

In this passage we do not think sufficient distinction is made between marks which are constitutive of a concept and marks which are characteristic of an object;—between attributes which are employed in the *definition* of a class-notion and attributes which may be used in a *description* of the individuals which the class contains. The doctrine is open to a different objection, according as the term comprehension is employed in the one or the other relation. In the former, which is the ordinary logical sense, and which seems to be that intended by Mr. Thomson, the attributes comprehended can only be predicated in analytical judgments, or, as they are called in the above passage, judgments of explanation. Mr. Thomson appears to meet this

objection by holding that every new attribute is added, as soon as discovered, to the constitutive marks of the notion; in other words, that the progress of knowledge transforms synthetical judgments into analytical. But Geometry, and indeed every science in which definitions are genetic, is an exception to this rule. The attribute of having the square of the hypotenuse equal to the sum of the squares of the other sides, never forms part of the *notion* of a right angled triangle; nor does any advance of geometrical knowledge ever transform the 47th proposition of Euclid into an analytical judgment. If, then, the comprehension of a notion means the sum of the attributes forming its definition, judgments of this kind cannot be read in comprehension.

We see but one mode of meeting this objection, viz., by assigning another meaning to the term comprehension, understanding thereby the sum of the attributes possessed by the members of a class, whether forming part of the class-notion or not. But here we are met by an incongruity which the doctrine of quantification in both terms brings prominently into view. By that doctrine the copula of an affirmative proposition is regarded as expressing an *equation*, or, as we prefer to say, an *identification* of subject and predicate. The old theory of either term being *contained* in the other, as part in whole, whether by way of predication or of inhesion, is thereby abolished, and rightly so, for the material significance given in that theory to the copula tends to confound all distinction between the form and the matter of thought. But its abolition involves further changes. Under the old view, there is no inconsistency in regarding the related terms under opposite aspects. An attribute may be spoken of as inhering in a subject, or an individual as included under a notion, without any logical impropriety: the objections, if any, are solely metaphysical. But the laws of thought will not permit us to *identify* with each other these opposed notions. We can only identify attribute with attribute, or subject with subject, not a subject on one side of our copula with an attribute on the other. Hence arise two, and two only, *symmetrical* modes of expression.

1. Attribute identified with attribute: "some A is all B," or, the whole of the attributes constituting the concept B are identical with a portion of those constituting the concept A.

2. Subject identified with subject: "all A is some B," or, the whole of the things possessing the marks A are identical with a portion of those possessing the marks B.

The first of these is that to which we have above objected as admitting only analytical judgments; the second is that which we have adopted throughout the present remarks, and which is competent to all kinds of judgment. To express synthetical

judgments in comprehension, a third and unsymmetrical form must be adopted, in which the sum of the attributes constituting the concept B are identified with a portion of those possessed by the things which also possess A. This last form is unsymmetrical and useless. It is unsymmetrical, because the things or objects thought under the concept are introduced on one side only of the equation: it is useless, as being only a circuitous mode of stating what is expressed directly in the second form. For it is manifestly the same thing to say "the attribute B is one of those possessed by the objects which possess A," and "the objects which possess A are identical with some of those which possess B."

We do not advance the above objection as insuperable; indeed, we have that opinion of Sir William Hamilton's learning and philosophical genius, that if we venture to impugn any of his positions, it is with the expectation of being refuted. But it constitutes at least a difficulty in the system, and one which we have not yet seen satisfactorily disposed of. The view which we have given in the earlier part of these remarks, of the nature of the mental process of judging, and the consequent distinction between the matter and the form of judgments, has been adapted exclusively to the possible extension of the terms. The problem which we wish to see satisfactorily solved by the advocates of Sir William Hamilton's doctrine may be stated as follows: To construct a synthetical proposition containing an *equation* or *identification* of subject and predicate in any other respect than that of the objects thought under the compared concepts.

A word, before concluding, on systems of notation. We object to the illustration of logical processes by geometrical diagrams, as in the system usually attributed to Euler.* To compare the mental inclusion of one notion in the sphere of another with the local inclusion of one portion of space in another, is to confound the individual with the universal, the immediate presentations of intuition with the mediate cognitions of thought, and to lose sight of the characteristic feature of a concept, that it cannot be depicted to the sense or the imagination. As little do we approve of the algebraical method adopted by Mr. De Morgan, in which the premises of a syllogism are connected by a *plus*, and their relation to the conclusion expressed by the sign of equality, a method too redolent of the computation theory noticed above, and tending to confound the intuitive judgments of Arithmetic with the discursive inferences of Logic. The algebraical equation proper does not represent a syllogism, but a

* Euler appears to have been anticipated in this respect by Weise, whose method was published in Lange's *Nucleus Logicæ Weisianæ* in 1712. See Drobisch, *Neue Darstellung der Logik*, § 44.

proposition; a proposition which, like any other, may form part of a logical reasoning, but cannot with any propriety represent the whole. Sir William Hamilton's scheme is free from these objections, and possesses the merit of being distinct from the established notation of any other science. It is on all accounts to be preferred to any rival method that has hitherto appeared. But we confess that, as far as our own experience goes, we are inclined to an opinion the reverse of that of Mr. Thomson, who holds that "to be able to represent to the eye by figures the relation which subsists in thought between conceptions tends greatly to facilitate logical analysis."*

But it is time to close a discussion which we fear has already severely tested the patience of the reader. For the dry and abstruse character of its details, we trust a sufficient apology will be found in the present aspect of Philosophy in this country. Condemned since the days of Locke to a long period of unmerited neglect, Logic has within the last few years again engaged a considerable share of attention, and has been cultivated with much ill-regulated energy; an energy which, if not brought under the control of definite and fixed principles, threatens to produce consequences scarcely less to be regretted than the former lethargy. It is a question of no light importance to all interested in the progress of philosophical thinking, in what manner the reviving study shall be prosecuted. Discontented with the definite but narrow field which it can claim as a pure or formal science, there are some who would invest it with a spurious importance by adding to its speculative principles a portion of its practical uses. Against this confusion of the laws of thought with their material applications, we have in the above remarks more than once recorded our protest. By whatever right one iota of the matter of thought can claim admission into the science, by the same right the whole universe of human knowledge is entitled to follow. Logic thus cultivated must be arbitrary or impossible. As little, however, can we advocate the exclusive study of an isolated and barren formalism. It is in connexion, not in confusion, with the sister sciences, as a branch of mental philosophy, that Logic may and ought to be exhibited; and it is to the expediency of

* We have already expressed our dissent from the fundamental doctrines of Hegel's Logic. In the following passage, however, we fully concur, as applicable to all views of the science which recognise a distinction between intuition and thought. "Da der Mensch die Sprache hat, als das der Vernunft eigenthümliche Bezeichnungsmittel, so ist es ein müssiger Einfall, sich nach einer unvollkommenen Darstellungsweise umsehen und damit quälen zu wollen, Der Begriff kann als solcher wesentlich nur mit dem Geiste aufgefasst werden. Es ist vergeblich, ihn durch Raumfiguren und algebräische Zeichen zum Behufe des *äusserlichen Auges*, und einer *begrifflosen, mechanischen Behandlungsweise*, eines *Calculus*, festhalten zu wollen."

such a course that we earnestly solicit the attention of academical bodies. The University of Oxford, in its recent Examination Statute, has prescribed, "Si quis in dialectica se bene institutum probaverit, hoc in honorum distributione aliquantum momenti habeat." In the propriety of this decision we fully concur; the manner of providing for the *bona institutio* may, we think, be profitable matter of further legislation. Of logics made easy and logics made useful we have in all conscience had enough. The one have sufficiently shewn that it is possible to be shallow without being clear; and the other, that the method of a science may be utterly deformed without obtaining in the slightest degree the end proposed by the deformation.* But, on the other hand, if Logic is to be anything more than a mere sophistry of words or tissue of abstractions, it must neither, as with Hegel, aspire to fathom the infinite by the processes of reason, nor, as with Kant, disdain all connexion with the so-called empirical facts of psychology, which in truth are empirical only as it is empirical that we live and move and think at all. "La Logique," says M. Cousin, "n'est qu'un retour de la psychologie sur elle même;" and the whole history of philosophy confirms the assertion. The philosopher to whom we owe nearly the whole material of Logic was the author of the *De Anima*. The philosopher who has done most to secure for the science an exact definition and province was the author of the *Kritik der reinen Vernunft*, whose contributions to psychology furnish at once the best defence and the most valuable means of transgressing his own precepts with regard to Logic. The philosopher to whose influence it is mainly owing that Logic in Germany has ever been estimated at its proper value was the author of the *Nouveaux Essais sur l'Entendement humain*. Sir William Hamilton's attainments in mental science will be acknowledged by all who are acquainted with his edition of Reid. The philosopher whose dictum we have quoted above has contributed more than any living writer to the progress of psychology in France: the most valuable recent contributions to Logic in that country emanate from the same school, and are professedly written on the same principle. These facts need no comment.

* On this point we have valuable testimony from Germany and from France. "So ist denn auch," says Rosenkranz, "die Logik hundertfach von philosophischen Stümpfern *utiliter* gemisshandelt worden." "Sans la Logique," says M. St. Hilaire, "l'esprit de l'homme peut admirablement agir, admirablement raisonner; mais sans elle, il ne se connaît pas tout entier: il ignore l'une de ses parties les plus belles et les plus fécondes. La Logique la lui fait connaître. Voilà son utilité; elle ne peut pas en avoir d'autre." Herbart too, the most eminent expounder of Formal Logic since Kant, expresses himself to the same effect. "Die Logik sollte ihr angefangenes Werk vollenden, in dem sie die im allgemeinen mögliche Verbindung der gegebenen Elemente des Wissens vollständig nachwies; der Nutzen würde sich hinterher finden."

ART. V.—*Autobiography of the Rev. William Walford.* Edited, with a Continuation, by JOHN HOUGHTON. London, 1851.

THAT which entitles this volume to notice beyond the circle of private friendship, and of religious connexion, is not only the peculiarity of the case of suffering which is described in it, but the rare circumstance that such a case should be narrated and described by the sufferer himself, and he, too, a man of superior intelligence and many accomplishments. It is natural to think that some advantage should be taken of an instance of this sort when it occurs, tending perhaps to the furtherance of science; perhaps to the strengthening or illustration of some principle in morals.

The late Rev. William Walford was an esteemed minister of the Congregational order; and during many years was Resident and Classical Tutor of the Independent College, Homerton—a colleague, therefore, of Dr. John Pye Smith, that ornament of the Dissenting ministry. Mr. Walford was a man of clear intellect, sound judgment, and, one may say, of metaphysical turn. His religious history, as given by himself, with much modesty and ingenuousness, cannot be perused without receiving from it an impression very favourable as to his personal seriousness, and the elevation and purity of his character as a Christian man. He has become known as a religious writer and biblical critic;* and as a tutor he is gratefully remembered by those who were his pupils.

Mr. Walford commenced his religious life in a manner—we must here refer our readers to the volume—which carried with it to himself a powerful and permanent conviction of its derivation from on high. He felt and knew that in *his* case certainly, “faith was not of himself,” it was “the gift of God.” This persuasion as to the source and the reality of his spiritual existence, it is well to notice. Conjoined with this characteristic of his personal religious feelings, was an early-developed propensity, following him through life, to attempt—with restless and fruitless assiduity, a solution, never by finite minds to be attained, of the problem of the origin of evil. We note this fact in this place, merely as it enters into a due consideration of the case

* Mr. Walford's publications are—*The Manner of Prayer. The Book of Psalms: a new Translation, with Notes. Curæ Romanæ: a revised Translation of the Epistle to the Romans; and, A Catechism of Christian Evidences, Truths, and Duties.*

before us. Speaking of an early stage of his religious course, Mr. Walford says—he was then in his eighteenth year—

“Suddenly I was thrown into extreme agitation, by observing the universal prevalence of moral and physical evil over the whole race of mankind. An inquiry concerning the cause of this desolating calamity immediately engaged my attention. All other considerations were suspended, that I might, if it were practicable, gain some satisfaction on the solemn and mysterious subject. The more, however, I meditated on it, the more incompetent I found myself to devise a solution. I was altogether ignorant that the question of the existence (origin) of evil is one of all ages, and of all thoughtful men; and I was equally ignorant of the discordant theories that have been devised to account for the frightful phenomenon.”—P. 46.

It was, in fact, this one subject and this perplexity that constituted throughout life the nucleus of the mental sufferings of which, from physical causes, he was the victim: it demands, therefore, to be noted in taking account of those sufferings. At times they reduced him to “a state of despair, bordering on insanity.” Now and then, he says, “the cloud broke for a brief interval, when I was consoled by a hope that the darkness would be dispelled, if not sooner, yet by the bright discoveries of the heavenly state.” He had, however, so far attained a due religious tranquillity, as to exercise the Christian ministry with acceptance and advantage to others and comfort to himself for a course of years. At length a malady which from early life had more or less affected him, became so much aggravated as to induce him to surrender the pastoral office, much to the regret of his congregation, at Great Yarmouth. He thus introduces this subject:—

“I have hitherto said nothing of an insidious malady by which, from a very early age, I was often very grievously affected, but of the nature and causes of which I was altogether ignorant, though its effects were inexpressibly painful. This malady had shewn itself chiefly by almost incessant headaches from my infancy; but soon after my settlement at Yarmouth it assumed a new form. I was attacked by paroxysms of despondency, which, during their continuance, rendered life a burden almost intolerable. I could give no account of the reasons of such disquietude, and was at a loss to devise any probable means of relief.”—P. 147.

A journey on horse-back brought some relief, but these sufferings recurred frequently during the course of the fourteen years passed by Mr. Walford at Yarmouth.

“With almost every source of happiness open to me,”—Mr. Walford was happy in his home and congregation,—“I was often for

months together more wretched than I can describe. My prospects were darkened by the thickest clouds; all things, present and future, were encompassed with fear and dread. Taciturnity, irritability of temper, an unnatural and diseased sensibility of conscience, and such a degree of indolent lassitude as rendered every mental occupation distasteful, increased over me to such a degree as to alarm me lest the sanity of my mind should be subverted. At times my thoughts were so agitated, and my conceptions so disturbed, as to make me apprehensive that some foreign invisible agency was acting upon me. Imaginations of the most extraordinary nature often darted upon me with such rapidity as left me without control over them.”—P. 148.

The sufferer had recourse to various means for diverting his thoughts, but in vain.

“Often I wandered about the fields and country, driven from my occupation and my home by unutterable anguish; lingering in unfrequented lanes, and hanging on gates and stiles, pouring out frantic and broken supplications to God to have mercy upon me. Not seldom, I was alarmed lest, in spite of myself, I should abandon all religion, and become an infidel or atheist. I dared not disclose to any the condition of my feelings, lest I should be taken for such, or for a madman. My pious, cheerful, and affectionate wife was but too sensible that some sad cause of disquietude preyed upon me; but for several years I replied to her anxious inquiries merely, that my spirits were low and depressed, from what cause I knew not. If these torturing paroxysms had not been relieved by frequent intervals, I must necessarily have relinquished my profession, as it was with inexpressible difficulty I performed its duties, while they were forcibly pressed upon me. So extraordinary, however, was my state, that during the intermissions I experienced I was often cheerful and even gay; I lost sight of my sorrows, and was astonished at myself that I could ever be so painfully affected. This alternation of feeling, altogether unaccountable to me, continued to actuate me through the whole period of my residence in Yarmouth.”—P. 149.

In the hope that change of scene and occupation might bring relief, Mr. Walford had accepted an invitation to become resident tutor at Homerton Academy, and for a while the engagements of this new position had the desired effect; but after a while the malady returned in full force, and his mind returned in despair upon its perplexities concerning the origin of evil. Medical aid was resorted to, but with no effect; and the gloom which had so long clouded the mind was deepened to anguish by the death of a beloved daughter. Mr. Walford’s distress on this occasion is especially to be noted, as one among several indications clearly distinguishing his malady from what it might seem to resemble—insanity. The *insane* seldom grieve in any such manner, or on such occasions. The following passage is very significant, regarded as a feature of the case:—

“The influence of the two kinds of distress by which I was affected differed as much as the causes of it did. My own peculiar sufferings never softened my heart—never drew a tear from my eyes; I was unable to weep though I often passionately desired to do so. The grief I felt during the time my child was daily sinking to death, and immediately following, vented itself in floods of tears, that seemed to exhaust my whole nature and render me incapable of repressing them.”—P. 170.

The unabated pressure of this affliction at length induced Mr. Walford to retire from his position at Homerton, and to seclude himself entirely from the world.

“I began to shut myself up in solitude, as walking or riding through the streets made me feel as though every one I met was acquainted with my wickedness and misery. I could not endure to look any one in the face; and ere long the sight of my own face filled me with fear and aversion, as I considered myself to be wholly a reprobate—forsaken of God, and odious to man.”—P. 179.

During four years after his retirement from Homerton this distress went on increasing; and descriptions of these sufferings fill pages of this Memoir. Sometimes a passionate impulse to pray seized the sufferer and rendered him almost frantic; but more often devotional exercises were intolerable to him. His books were disposed of that the sight of them might not torment him. “I earnestly wished,” he says, “that I had never learned to read or write.” The voices of his family inflicted agony upon him, as well as the light of day, and the sight of ornamental furniture, especially of looking-glasses; and his dress and personal appearance were neglected. The irritability of his temper being such that he fully expected that he should some day murder some of the inmates of the house.

“The agitation and restlessness that affected me were so great that I was unable to sit down, as the moment in which I attempted to do so brought an increase of misery; and I was thus kept pacing up and down my parlour from the time of getting up until going to bed. I was so intensely wearied by this incessant going to and fro as frequently to scream with anguish. In consequence of this painful excitement I seldom rose from my bed before noon, as I was able to continue this posture without additional pain. . . . At night, when endeavouring to compose myself to rest I was often roused to vigilance by convulsive startings, which no sooner ceased than the most hideous appearances of monstrous face and shape would pass before me, to free myself from which I was constrained to keep my eyes open, that the real objects about me might dispel those of my disordered imagination.”—P. 186.

A friend had advised Mr. Walford to divert his thoughts with

chess or bagatelle. At first he rejected the idea with scorn, but at length, having made the experiment, he found it avail for enabling him to sit during the day. He therefore called for the board as soon as he came down stairs in the morning, and insisted that his wife or niece should play the whole day, until it was time to retire for sleep. In this manner he played thousands of games. At length he happily discovered that he could play backgammon without a partner.

Relief, however, at length arrived, yet not by the aid of medicine or any new means of recovery. Whether the change in the sufferer's habits should be regarded as the *symptom* of an incipient restoration, or as the *cause* of it, it is not easy to determine. First came a disposition to leave the house and walk after night-fall, when he could be unobserved; then a resumption of his habit of smoking; next a return to books—and anxious to avoid any that might recall religious ideas, the first he selected was Baines' "History of the Cotton Manufacture," and next, Babbage's "Economy of Manufactures," both which he epitomized; and he then commenced a translation of Herodotus. It is manifest that a spontaneous cure was at this time in progress, and had advanced so far that a mere accident sufficed to enable mind and body (so to speak) to cast off the slough of disease which still encrusted both. He was invited on a fine morning in May to take a drive:—

"The verdure of the grass, trees, and country in general, with the fineness of the weather, so affected me, that all my fears, disquietudes, and sorrows, vanished as if by a miracle, and I was well!—entirely relieved, and filled with a transport of delight, such as I had never before experienced. My hope and confidence in God were restored, and all my dreary expectations of destroying myself or others were entirely forgotten. On my return home from this reviving excursion every desire to shut myself up and exclude my friends was departed, and I could with difficulty restrain myself from being always abroad." —P. 193.

This recovery was permanent for a length of years; and Mr. Walford, some time after he had regained comfort and health, took charge of a small congregation at Uxbridge. In reflecting upon what he had suffered he thought he detected the physical cause of his malady. He mentions the circumstance of his having been liable from childhood to frequent attacks of headache, which increased in intensity up to about the twenty-second or twenty-third year of his age, at which time he became liable to a discharge of fetid mucus from one nostril. The opinion of Mr. Cline, whom he consulted, was, that an ulcer had formed in the frontal sinus, on one side. But the remedies applied by this eminent surgeon, who, as it appears, misunderstood the case, did

but aggravate the disease. Dr. Withering of Birmingham, whom he afterwards consulted, inquired if he had at any time sustained an injury upon the skull. This pertinent question led him to recall what his mother had mentioned, that when about two years old he had fallen on the edge of a fender and received a dangerous wound on the forehead, the scar of which remained through life: strange that this scar had not caught Cline's eye! "That," said this physician, "that is the origin of the pain you suffer." The injury had spread inwards, and produced a wound which surgery could not reach, although possibly Nature, in the lapse of years, might work a cure; meantime this deep-seated mischief "should not be tampered with, although stimulants might be employed to assist the escape of the purulent secretion."

Some mitigation was obtained by these means; but just in proportion as the headaches became less frequent, and less intense when they occurred, those mental sufferings which have above been described were enhanced. The dejection and the anguish of the soul took the place of the paroxysms of bodily suffering. The substitution of the one kind of suffering for the other was so gradual as not to attract Mr. Walford's attention at the time, but he at length became fully cognizant of it. After his recovery he could not doubt that both were attributable to the same cause—the injury the head had received in infancy; and that when at length mental distress came in place of bodily pain, it was because the diseased action had passed in from the cranium to the brain itself. This diseased action at length wore itself out, and a spontaneous recovery ensued.

Threatening clouds did, however, at times darken Mr. Walford's skies—the perplexities of his early years regained their influence, in some degree, over his mind, and his last days were in fact saddened by a return, though in a somewhat mitigated form, of his malady—the same despondency, with distaste of his usual occupations, incessant restlessness, and occasional outbursts of the language of impassioned despair. Religious consolations did, at moments, return to him, but this gloom was not again dispelled, and he sunk away from life under the cloud.

What remains for placing the whole of this remarkable case before the reader, is to subjoin to the sufferer's own intelligent description of it, the result of a *post mortem* examination.

" Examination of the body of the Rev. William Walford, on the 27th June, 1850, the fifth day after his decease.

"No remarkable external appearance; there was more fat over the whole body than could have been expected when his long illness and great abstinence from food are considered. On opening the head the

dura mater was found so firmly attached to the bone at two points as to be incapable of separation without being torn. Those two points were—one near the superior and anterior angle of the right parietal bone, the other at the superior and posterior angle of the left parietal bone; they were marked on the internal surface of the bones by deep depressions, having a sort of honeycombed appearance, but not carious. The outer table of the skull alone remained at these parts, and its thickness scarcely exceeded stout letter-paper; the size of both depressions was nearly the same—about an inch long by three-fourths of an inch in breadth. The colour of the brain under the first point was different from all its surrounding surface; it had assumed a green tinge, similar to long retained pus; this did not extend more than a quarter of an inch into the substance of the brain. There was no discoloration of the brain at the second point, nor was there elevation of the surface at either; the depressions in the bone were from thickening of the dura mater in those specified localities. The dura mater throughout its whole extent had lost much of its proper vascularity, and assumed a thickened yellow leathery appearance. Over the whole surface of the brain there was considerable serous effusion: the ventricles were full of water; there were no signs of recent inflammatory action, but there were several points of unnatural adhesion of the membranes, denoting the former existence of an inflammatory state. The lungs were sound throughout, but had large adhesive bands at various parts, the consequence of inflammation at some remote time. There were several ounces of water in both sides of the chest.

“ The heart was large, flabby, and covered with a good deal of fat, especially at the base. It contained no blood; it was strongly adherent to the pericardium over the whole space corresponding to the left ventricle, the evident effect of inflammation at some former time. The valves of the heart were sound; the aorta was fully one-half larger than natural, and at its origin from the heart was an almost continuous circle of ossification. The whole inner surface of the left ventricle and of the arch of the aorta had a deep red colour, like inflammation, but there were no enlarged capillary vessels to be seen. The pericardium contained about an ounce of water. All the abdominal viscera were in a healthy condition.

“ DAN. MACNAMARA, *Surgeon*, } Uxbridge.”
 “ WILLIAM RAYNER, *Surgeon*, }

In commenting very briefly, as we may, upon this case, it need scarcely be said that it offers no indications whatever which should ally it to insanity. The most extreme and agonizing paroxysms of the malady, affecting, as they did, the mind only, were of a character altogether unlike the symptoms of that deeper disease. The sufferer, crushed to the earth, gave way to misapprehensions of himself and of the world around him; but he did not talk logically on the ground of utter illusions. He

trembled at the thought that the violence of his emotions might some day drive him in frenzy to injure those around him. He did not murkishly ponder murder and suicide. Besides, the affections were in their natural state, which, during insanity, are usually dislocated, retroverted, or utterly torpid. To his affectionate and patient wife he anxiously put the question, "Are you not afraid to live with me?" She, truly interpreting his symptoms, replied, "Not in the least." The death of his child dissolved the father in grief—floods of tears flowed on this occasion. This circumstance alone might suffice to exclude the supposition of insanity.

The *post mortem* examination of the cranium and brain, if regarded as a conclusive summing up of the history of the malady, as furnished by the thoughtful and intelligent sufferer, removes all obscurity from the case, considered *physically*; and this examination should also suffice to repress any attempted theorizing with the intention of borrowing support from it for this or that doctrine, as to the branular structure, or the location of faculties. The points of adhesion of the dura mater to the interior plate of the cranium do not happen, we think, to hit the spots where they *ought* to have been found as the causes of despondency. Nor even if there had been any such coincidence, would the inference thence derived have been legitimate; for, inasmuch as inflammation had affected the dura mater extensively, or universally, and as serum was suffused over the entire surface of the brain, and throughout the ventricles, a localized cause of particular mental affections can never be assumed. The analogy of facts in pathology warrants the belief that the presence *anywhere*, in the branular or nervous system, of a very small amount of semipurulent matter, would be enough to diffuse throughout it an infection, showing itself in a universal derangement of the nervous economy. It is thus that the absorption of an infinitely minute particle of a specific virus, as in hydrophobia, produces an excitement which soon becomes fatal, throughout the nervous system; and thus, too, specific crudities in aliment, taken up by the mesenteric vessels, and passed into the circulation, give rise to monstrous dreams, and inflict a quick punishment upon the indulgence of appetite at supper.

We are not about to lecture "eminent practitioners," and yet one must marvel at the misapprehensions into which such frequently fall. It is strange that an able physiologist like Cline, with the indications of the interior mischief before his eye, should not have better read the symbols. Those who, as amateurs only, have looked into skulls, must have noticed frequent instances in which a barely observable irregularity, or morbid condition of the

interior plate, has told the troubled history of the departed inmate. Now those who are professionally looking into hundreds of skulls (it might be thought) would find it easy to read the indications of living disease in the contrary direction ;—that is to say, from the symptoms to divine with certainty the occult cause. It is not for us to say, or to surmise, whether a true conjecture as to the cause of disease, in a case such as the one we have now had before us, might have suggested effective curative measures : perhaps not ; nor is it to be assumed as certain that a very distinct statement of his case to a patient so intelligent as Mr. Walford, would have availed much—or perhaps at all—to bring about what we might term a mental *metastasis* of this sort ;—“ I now know and understand that the distress and despondency I endure, spring directly from an inaccessible abscess—such and such. I will so think of it, therefore, henceforth ; and although I must continue to suffer, these sufferings shall not be allowed in my view to spread a pall over the universe.” It is doubtful whether, in a case so peculiar and extreme, any such substitution of the physical for the moral and intellectual could have been effected by an act of the will, even in the strongest mind. Perhaps we should assent to the sad conclusion that *extreme* cases such as this, lie beyond the reach, as well of the mind itself, as of the physician or surgeon.

But are there not less extreme cases which, if properly understood, may admit of alleviation or cure ? We incline to think that mild and *undefined* cases of branular disturbance, indicated by peculiarities of temper, by singularities of opinion, and by chronic or acute fits of moodiness, abound in all circles. If so, what are the practical inferences ?

Some of us have already acquired this measure of personal wisdom, leading us to say—when sliding into a mood which our better reason resents—“ this is my infirmity ; it is not all the world that ought just now to be blamed ; but my own stomach rather, or liver, or brain.” Let those confess the humiliating fact who are conscious of it, that a well-dressed mutton-chop has sometimes brought them over from Manicheism, or has seemed to condense within its savoury juices, the very essence of a better philosophy. We admit no materializing tendency in saying this.

But may it not safely be assumed that all *moods* of mind—not occasioned by actual and obvious circumstances ; that all individual peculiarities of temper, and all those singularities of opinion which, after having been a hundred times exposed, refuted, and apparently discarded, return ever and again to their wonted place of supremacy in the mind ; that all these specialities of the

individual, take their rise in the animal organization, either as consequences of mal-formations, or of morbid action, or inaction?

The first inference then, of course, is to employ medical treatment, where the case is sufficiently pronounced to call for it. But the second inference is of another sort, and it bears upon the question of what is the best *moral* treatment in such cases. Now in dealing with them—and the father of a family, and the teacher of youth, and the minister of religion, are called to deal with them—it is, we think, an error to take the course of a sedulous and solicitous treatment of the patient *in his own style and tone*. We assuredly shall end in making him a sentimental hypochondriac if we do so. It is easy to be too wise, too nice, too “considerate,” too learnedly skilful, in attempting cures in such cases. In a word, that which such patients need is not moral *physic*, but moral *aliment*. An ingenuous medical adviser often says, “You don’t want *me*; get abroad and live well.” So it is in the analogous instances which we have in view. Temper, and moodiness, and a tendency to view all things under one colour, which a parent may see to have a physical origin, (and this ought perhaps always to be assumed as the fact,) are not to be reasoned with (ordinarily) or talked out of the patient; nor is he to be worried by reiterated rebukes into some morbid equivalent, which is very likely to prove itself something more or worse than an *equivalent*.

Rather administer more of bland, tranquil love—not to the *patient singly*, but to the household of which he is a member; let a better ventilation in the house—the *oikos*—disperse domestic miasmas; open the windows to the light of heaven; increase the daily rations of sound doctrine—that is to say, Christian beliefs, unadulterated, undiluted, and ungrudged. The things which we assuredly hold to be true, let us speak of them as if we so held them; rising up and sitting down, going out and coming in. Ill-temper and despondencies, and religious moroseness, are abated, mitigated, or remedied by, and in the midst of heaven’s atmosphere, and the day-light of Christian hope. Are we saying that “miracles” of cure may be effected by them, or by any such means? No, indeed; nevertheless more may thus be done than those imagine who have not fairly made the experiment.

There is doubtless a broad middle region, indefinitely bordered, on the one side by those cases of *severe* physical disease, to which medical or surgical treatment must almost despair of affording relief; and on the other side, by instances of a *purely* intellectual and moral kind, in the treatment of which the homogeneous

means of suasion and reasoning, and these only, are appropriate. But to those far more numerous and *mixed cases* which, belonging, as to their first cause, to pathology, are nevertheless remediable wholly or partly, by means of moral treatment; to these cases we should apply a rule analogous to that which undoubtedly would now, by most practitioners, be adhered to in treating the same cases physically: "Do not tamper with the general health by dosing the liver, or the stomach, or the brain; do whatever will invigorate the entire animal system." In the moral treatment, likewise, we say—cease to argue with infatuation; do not apply logic to a sullen misanthropy; cease from attempting to tinker a bad temper. Be deaf to the outbursts of petulance; be blind to those improprieties of which the patient, left to himself (or herself) is presently ashamed. Do not neglect the disease; but do not let the patient feel that you are always thinking of it. Be sure that the remedy, if indeed the case admits of moral and religious treatment, is to be found in a free administration of great and soul-quickenings truths—truths of universal applicability—truths that recognise no individual peculiarities—truths that are as broad as the heavens, as bright, and as unchanging.

- ART. VI.—1. *Researches on Magnetism, Electricity, Heat, Light, Crystallization, and Chemical Attraction, in their relations to the Vital Force.* By KARL, BARON VON REICHENBACH, Ph.Dr. Translated by WILLIAM GREGORY, M.D., F.R.S.E., Professor of Chemistry in the University of Edinburgh. 1850.
2. *The Power of the Mind over the Body: An Experimental Inquiry into the Nature and Causes of the Phenomena attributed by Baron Reichenbach to a New Imponderable.* 1846.
3. *Letters on the Truth contained in Popular Superstitions.* By HERBERT MAYO, M.D., &c. Second Edition. *Supplementary Letter.* 1851.

It has been frequently asserted, and that almost from time immemorial, that the common magnet is capable of re-acting upon the nervous system of man. MESMER attributed all the phenomena of animal magnetism to the efflux and the influx of a subtle fluid, conceived of as specifically localized in the magnet, but radiating also from stars and planets, sun and moon, the earth and the sky, and most effectively of all from the bodies of healthy and viripotent men. Less adventurous medicasters have confined themselves to the power of the magnet proper and to metallic tractors. Partly on account of the somewhat paracelsian character of poor Mesmer, partly because of the bombastic and unenlightened enthusiasm of the vast majority of his disciples, and partly owing to the indeterminable nature of the professed phenomena, men of positive science have generally held aloof from the whole subject. Men of observation, accustomed to the use of telescopes and equatorials, of microscopes and micrometers, barometers and thermometers, thermoscopes and electrosopes, balances and test-glasses, entertain a laudable aversion to the employment of the morbid nerve of exceptional human beings as at once the indicator and the measure of any physical force whatever.

Even physicians, who never have had, and probably never shall attain to anything like physiometrical accuracy of observation in the principal objects of their study, namely in symptoms and cures, have steadily and sternly refused to have anything to do with the magnet and its alleged effects on certain patients. They have even scouted, abused, contemned, and banned the unfortunate magnet, with that impetuous hatred which is characteristic of the otherwise magnanimous profession;—as if such proceedings could put a summary stop either to its influences or to people's belief in them!

The great obstacle in the way of animal magnetism, in so far as the regulars of science are concerned, is the circumstance that the only known re-agent upon the professed and otherwise undiscoverable force is the exceptional nerve. It is to sensation indeed, that is to say to touching, tasting, smelling, hearing and seeing nerves, that we owe all those facts the recording, the classification, the generalization, and the co-ordination of which constitute the whole substance of natural science; but it is to the common or general sensations of the race, not to the exceptional and particular sensations of the individual. It is also the unfailing instinct and practice of positive science to distrust the obscurer senses of touch, taste and smell. It reserves its confidence for those of hearing and sight, the differences and identities of sound and of light being directly perceptible by the ear and the eye. In fact, it may be said that it is always the first effort of the exact sciences to transform the dimmer perceptions of the more deceivable organs into those of sight, the most discursive and accurate of the senses. The mineralogist does not satisfy himself with the intimations of what has been called the muscular sense, or that sense of resistance which is related to the perception of weight, concerning the specific gravity of a stone. He weighs it first in the air, then in water; notes the difference between the two weights; and thence computes its specific heaviness. The chemist does not trust his fingers, or even his lip, for the temperature of his agents and reagents; but invents the thermometer, and reads off his measurements with the eye. It is the same in the sciences of magnetism proper, electricity, and galvanism. Even in the investigation of sound (which is measurable with such exquisite nicety by the ear, as to render the art of music not only possible, but the very anti-type of mathematical proportion,) the natural philosopher converts its vibrations into visible things before he will philosophize upon them. In the region of the visible, on the other hand, he trusts as little as possible to the immediate reactions of the eye; but devises micrometers, photoscopes, and what not! The excessive beauty of all this procedure consists neither solely nor mainly in the transmutation of the perceptions of the lower senses into those of the eye, which is 'the light of the body' as reason is the light of the soul. He would deem but poorly of this great preliminary device of science who should think so. The true beauty of this primary invention consists in its elevation of the eye itself, from being a mere measure of external phenomena, to the dignity of being a measurer of them;—two things as different from one another as a polypus from a man.

It is chiefly in the art of healing that this nobler method of procedure is not realizable as yet. The physician must work as

well as he can upon the reported sensations of his patient, the sounds of his stethoscope, and the feelings of his own fingers; enlightening such comparatively vague intimations as reach him in those ways, to the best of his ability, by means of knowledge derived from the scalpel, the microscope, chemical analysis, and other instruments of science. Let him be ever so learned in anatomy, organic chemistry, histology, pathology and all other sciences, it is very seldom that he can altogether dispense with the sensations of his patient; that is to say with the reported reactions of the morbid and exceptional nerve. It might, therefore, have been expected that physicians could have approached the subject of animal magnetism without scientific distress; and that not only because it professes to deal with the miserable body of man, but because its method of inquiry is akin to that of their blessed art. Alien to the habits of the natural philosopher and the chemist, its ways of procedure are not altogether foreign to theirs. It is accordingly not so wonderful that men like Elliotson, Esdaile and Engledue, to name no foreign doctors, should have entered this department of doubtful science with the confidence of an honourable scepticism, as it is curious that the vast majority of the profession should have turned their backs upon it with aversion. This is not owing to motives of self-interest or scientific bigotry, but simply to that instinctive craving in the man of science for instrumental observation, which has been deepened in the medical men of the present day by the grand predominance of the exact sciences. They have failed, perhaps, to remember that the methods of such sciences are not altogether applicable in medicine. They have certainly gone beyond their preceptors; for it is notorious that men of eminence in optics, in chemistry, in natural history, and in physics in general, have shown more interest in the alleged phenomena of animal magnetism than the descendants of Hippocrates and Galen. It will likely be retorted on this assertion that it owes its truth to the fact that the physicist is ignorant of physiology. It may be so. The instinct of the profession may be preserving it from errors. It is even possible that those physicians who have dared to confront this phenomenal imbroglio, are not competent physiologists; for there is nothing more common in society than to meet doctors of medicine who are ignorant, not only of the first principles of physiology, but even of the very first principles of scientific research. But no man on earth can deny that it is the duty of every professed physiologist either to confirm or to confute the laborious and profound convictions of their colleagues in the architecture of science, be their supposed or actual deficiencies what they may:—or else to keep a wise and kindly silence. No other course of conduct is either manly or safe.

The animal magnet, however, has at last found a scientific champion in the person of Karl, Baron von Reichenbach and doctor of philosophy, resident and at work in Castle Reichenberg near Vienna. During the last decade of the century, this eminent personage has satisfied himself that the old story about the power of the magnet over the nervous system of man is well founded. Having surrounded himself with a multitude of witnesses to the fact, he has multiplied experiments with rare ingenuity; recorded hundreds of results with much fidelity; and constructed a generalization or theory of the whole subject, which is not without its feasibility and beauty. In short, the baronial doctor has either created a new science for posterity, and placed himself among the Copernicuses and Newtons, at least with the Voltas and the Oersteds of the world; or he has built himself as brave a castle in the air as ever was seen. There is, indeed, a third alternative, to borrow an image from Marryat's triangular duel: It is possible that Castle Reichenbach may turn out to be partly real and partly false, founded on facts but reared with unsubstantial inferences, begun in truth and ending in moonshine.

It is just six years since Reichenbach published the first part of his novel researches in two supplementary numbers of Liebig and Wöhler's *Annals of Chemistry*. It is impossible to deny that this experimentalist possesses certain of the qualifications for such an investigation in a very high degree. He had won himself a good name for accuracy and invention by his analyses of tar and of the proximate principles which he discovered to be the components of that fragrant olio. His knowledge of several departments of natural philosophy and history, as well as his active labours in them, had long been acknowledged in the commonwealth of science. It appears that he had earned the distinction of being unquestionably the highest living authority on the natural history of aerolites or meteoric rocks and stones. Altogether, he had approved himself a sufficient and reputable master in the great art of scientific observation. There was therefore no wonder that Berzelius, who made a greater number of accurate observations in chemistry than ever was done by any single man in the whole history of that science, should express the opinion that the investigations now under review could not possibly have fallen into better hands. The Swedish chemist had frequently expressed the wish, during the last forty years of his life, that the allegations of the mesmerists concerning the magnet should receive a liberal but searching criticism at the hands of some competent experimentalist; and his hope was fulfilled in the person of his friend the discoverer of creosote. The Baron has also been singularly fortunate in securing the confidence, approbation and discipleship of Professor Gregory, a man quite

remarkable for openness of mind in the direction of natural science. Those great qualities and strokes of good fortune, however, have not protected him from much injurious treatment : the insolent silence of neglect ; the private and social sneer of many scientific circles, where his name would have been pronounced with vast respect, if he had only not dared to venture on untrodden ground ; the open but uncandid criticism ; the virulent and unreasoning assault ; and even the depreciation of his past labours. It is the world-old tragedy of scientific history. No sooner does a man obey the impulse of conscience, and challenge the foregone conclusions of his age, than the hue and cry is raised against him. It is in vain that he shall lavish his good name, his means, his talents, the blood of his heart, the sweat of his brain, everything that is his, upon the working out of the thought by which he has been visited. One word of scorn, one flippant little word, will defraud him of the only outward reward he values, namely the sympathy of his brethren. Why, even if the enthusiast were the laborious and generous victim of some coil of error, he would still deserve the love and furtherance of men, for he is at least casting his life into some breach with bravery worthy of a better task ; but being the heavy-laden, and therefore the slowly-treading, perhaps the staggering bearer of a weighty new truth from the heart of Nature to the ears of her frivolous children, they ignore, flout, slander, obstruct, and even hate him. The highest and most enduring reward of scientific exploration, conducted in the spirit of the masters and not in that of the hirelings, is not even the finding of truth ; it is the finding of new strength, faith deepened in foundation, more capacious love, and hope building higher and higher. Such assuredly, let all critics and criticasters know and inwardly digest, shall be the mellow last-fruits of this protracted and harassing investigation of Reichenbach's, be the residual amount of scientific truth contained in his books what it may.

These researches have been continued with great industry ever since 1844 ; and the results of his manifold labours in this direction are now before the world in a large octavo volume, composed of two parts. Dr. Gregory has lately translated and published it for the use of the British public ; a service which is doubtless its own reward. The merits of this remarkable volume are great. The painstaking, conscientious, cautious, ingenious, we had almost said the religious, and certainly the self-possessed enthusiasm with which the experimental clew is followed from turn to turn of the labyrinth, is surpassed by nothing of the same sort in the whole range of contemporary science. The moral qualities of a great explorer are displayed by the author in no common degree, with one exception. It is

beneath Von Reichenbach to speak with so much bitterness of spirit against Reymond, his Berlin vituperator, or with such contempt of his young medical opponents in Vienna; although the former is a bully, and the latter are puppies: 'He is there sitting, where they durst not soar.' But his too great animosity against these wretched critics is not the exception referred to. It is a want of respect for the convictions of others; the very crime that is perpetrated against himself. His observations relative to ghostly or spiritual apparitions are little short of insulting to those who believe in such things; and all the more so, that they appeal to the very same kind of evidence as his own discoveries depend upon. Excathedral denunciations of other people's beliefs do not become the writer who exclaims against them in his own case. Ghosts are to be disproved or explained away, or else established and reduced to law, by the same methods of criticism as may be applicable to odylic flames. Then why does he indulge in such woundy contempt for the older school of mesmerism? Its cosmical fluid is as good as his; it is the germ of his one indeed, call it animal magnetism, call it odyle, or call it what he choose. To deface the memory of Mesmer is to disown his own father. Mesmer is the legitimate predecessor of Reichenbach, whether the Baron will or not. It was the doctrine of Mesmer, suggested by a chapter of Van Helmont's, that there radiates from the sun, the moon, the planets, the earth, in short from the whole of nature, a quick and subtle essence, which is not heat, nor light, nor anything else that is known. This secret force was furthermore understood by that speculative physician to be peculiarly resident and concentrated in the common magnet; and partly on that account, partly because the animal nerve was its only known measure or reagent, the fluid itself received the name of animal magnetism. Let us now see what sort of extension the magnetist of Vienna has given to these ideas.

The germinal fact from which this singular investigation has sprouted and grown, till it has become somewhat of a jungle it must be confessed, is very simple considered as a fact; but there are many ways of accounting for it, simple as it looks. When good strong magnets, capable of lifting some ten pounds' weight, are carried slowly down the persons (without touching them) of a score of people taken at random, one or more are sure to be affected by the passes (as they are called) in a notable and a somewhat describable manner. Sometimes so many as three or four such sensitives will be found in that number of subjects. Our author knows an institution where eighteen out of twenty-two women are perceptive of the sensations produced by the passes of the magnet. Many people, who enjoy an average de-

gree of good health, seem to feel the influence in question. The higher degrees of sensitivity, however, are shewn chiefly by the sickly; folk with weak nerves, the hysteric, the spasmodic, the cataleptic, the epileptic, the paralytic, sleep-walkers, and the insane. As for the very large number of healthy subjects, who displayed considerable and even remarkable sensitivity in the later of Reichenbach's experiments, it is not to be forgotten that the apparently healthy man may well be the subject of an unhealthy diathesis or habit of body. The tendency to fits, somnambulism, and madness may and does exist in thousands, who never shew it to the uninitiated eye:—a thing to be insisted on with all respect for Endlicher the botanist, Schuh the mechanician, Kotschy the traveller, and all the other healthy enough patients of the Baron. The difficulty is to find a family without hereditary morbid dispositions of the constitution; and a considerable, if not a large proportion of those inherited vices must be assigned to the class of nervous disease. This investigation would therefore have been more complete, if the hereditary and acquired predispositions of the so-called healthy patients had been ascertained. It is not a very difficult thing to do; but it is a delicate task, and we must be content without it in this instance. In the meantime, it would be unfair to assume that all the subjects described in the course of those researches are the victims of a neuropathic diathesis, or ill habit of body in the matter of nervous system. The reader may suspect it, but he cannot prove it. It is our own opinion, we confess; but opinions go for nothing in the sciences of observation and induction. At the same time, it is a point which the candid experimentalist in this department will do well to attend to, for it is an inquiry of some importance.

The sensation produced in the excitable by the magnetic pass is represented as being rather unpleasant than agreeable; and it is associated with a slight feeling either of coldness or of warmth, resembling a cool or else a tepid little breeze passing along the line of traction. They sometimes experience a sense of dragging or pricking in the parts under reaction. Formication or the sleeping of a limb is not an uncommon attendant of these experiments. There are some men in the prime of life who perceive this magnetic influence, but women are decidedly more sensitive. It is sometimes vividly felt by children. The most notable of this whole group of magnetic symptoms is the sensation of cold or of heat.

Starting from this primogenitive and obscure fact, our experimentalist has discovered a multitude of related things. He has found that one pole of the magnet produces the sensation of coolness, the other that of warmth. That single crystals of all sorts of

chemical substances, especially when very large and perfect, work the same effects as the magnet. That one pole of the crystalline axis produces coolness, the other warmth. That crystals possessed of more than one axis are also endowed with more than two poles of animal magnetic action ; how many axes so many poles. That chemical action is also animal-magnetic ; some reactions producing the cool, others the warm sensation, in the sensitive. That light is animal-magnetic precisely in the same way ; the light of the sun and sun-stars being cool, that of the moon and planets or moon-stars being warm. That heat, electricity, and galvanism are all capable of giving rise to the animal-magnetic phenomena. That the body of man is peculiarly potent in this way ; whence the manipulations or hand-passes of Mesmer and his disciples. That one side of the body produces the cool, the other the warm sensation, in the sensitive. That, in fine, everything in nature, crystalline or uncrystalline, magnetic, chemically active, luminous, cold or hot, dead or living, is capable of yielding similar results : a fact amazingly and suspiciously broad and general.

These things are known only through the reports of subject patients of course ; but Reichenbach adduces the testimony of some sixty people, of both sexes, of all ranks, of all degrees of sensitivity, some of them men of science, two or three of them members of the medical profession ; and the unvarying agreement of such a number of intelligent people had better not be set too easily aside. Anything like imposture is wholly out of the question. The simplicity, the purity, the precaution, the ingenuity, with which some of the experiments were made, cannot be too much admired ; as shall be found when we come to the discussion of the second great fact in the investigation, namely the perception by the sensitives of the odylic lights, as they are called. In the meantime, we accept and believe the fact of the animal-magnetic sensations of cold and heat, as evoked in the sensitives of our investigator by magnets, crystals, chemical mixtures, light, heat, electricity, and everything else.

Before proceeding to the theory of this broad fact, however, let us clearly understand what it is as a fact. The sensation produced is not an actual and ordinary sensation of heat or cold of course. No thermometer, no therinoscope, detects the slightest change of temperature. In a section devoted to the consideration of the difference between the agent of these phenomena (as well as others) and heat, the author is perfectly aware of this. Heat sometimes produces the cold animal-magnetic feeling. The warm radiance of the sun flashing upon a broad metallic plate sends the cool breeze through a long wire to a sensitive in an isolated chamber. In short, this animal-magnetic coolness or warmth is not real in one sense of the word ; that is

to say, it is the image of no object. It corresponds with no phenomenon of temperature. It is not a sensation proper; it is a mere quasi-sensation. It is a sensuous illusion. The magnet or the crystal appears to act upon the nerve of the subject in some yet occult way; and one of the effects of that action is the perception of a pseudo-sensation of heat or cold. That pseudo-sensation is a mere spectral illusion at the very best. Reichenbach knows this. He has even expressed it; but it does appear to the critical student of his work that he does not lay enough stress upon it, perhaps even that it does not seem to have pronounced itself with sufficient emphasis to his mind. He should have iterated and reiterated it all through the book. Neither the writer nor the reader could have held it too constantly and inexorably in view, 'for thereby hangs a tale.'

So much for the facts themselves; and now for the theory of them. It has just been said that the animal magnet (whether a common magnet, a man's hand, or a crystal) appears to stir, agitate, commove, or act upon the nerve of the sensitive in some yet wholly occult manner; and that one of the effects of that action, one of them, is the perception of a quasi-sensation of heat or of cold in such nerve or nerves. But there are two to a bargain; and even this small amount of claim for the power of the animal magnet is open to reasonable question. Mr. Braid the hypnotist, and also the most searching of the experimental critics of mesmerism, has published a counter-statement. He asserts the principle that the instrument employed, whichever of all the so-called animal magnets it may be, has nothing to do with the sensations in question; nothing, that is to say, in the way of direct causation. He can produce precisely similar sensations in certain sorts of people both with and without such an instrument. He takes a patient's hand, lays it on the table with the palm upwards, makes passes from the wrist down the fingers, and the subject soon begins to feel cold or warm, as the case may be, under the lines of passage. He then bids the patient turn away her head, and making believe that he is repeating the experiment, asks her what she feels; and she experiences the very same sensations as before, although no passes are being made. In short, he provokes the same sort of sensations as are described by Von Reichenbach, without the same instrumentation. He has only by word or sign to excite the expectation of the occurrence of such sensations in the patient's mind. Dr. Holland has shewn at large how the direction of the expectant attention to any organ or part of the body excites actions in that part.* The mesmerist or hypnotist, as Braid prefers to

* *Medical Notes and Observations*; a truly admirable book of facts and thoughts.

call him, is also well aware that he can present any image he chooses to his patient, by a word or a hint. It is therefore very natural for Mr. Braid to conclude that the Viennese patients experienced all those sensations, or rather quasi-sensations, merely because they more or less obscurely expected them;—in other words, that they directed their expectant attention to the parts apparently operated upon, and the sensations ensued. The uniformity in character of these quasi-sensations is no objection to this view, for the uniformity in character of all spectral illusions is one of the most noticeable of things about them. There is a law or unity of procedure in the phenomena of disease, quite as clearly displayed as in those of health.

Yet the conclusion of Mr. Braid is not obligatory. The same effect may be produced by two differing causes. A man may perceive the image of a tree, because the radiance of a veritable tree paints it on his retina; but he may also perceive the image of a tree because his nervous system is disordered, and a tree of conception is thereby intensified into a tree of quasi-sensation. The perception is the same in both these cases. A hypnotic patient may see a book, because a book is placed before her, or she may see a book because an experimentalist tells her his glove is one. Mr. Braid has failed to perceive this alternative, and his inference is therefore defective. His experiments may be good and true, but so may those of Reichenbach. His effects may have been produced by suggestion, Reichenbach's by objects. Similar as they are, and diverse as are their respective causes, they do not contradict one another. For our part, we accept them both. Braid's cases seem to be unexceptionable; but it is not easy to read the elaborate and orderly statement of the German naturalist, to consider the number and character of his subjects, to observe the precautions taken against any thing like suggestion, to notice the continual congruity of the descriptions given by the patients, to see the checks upon coincidence and unintentional collusion which occurred at every turn of the inquiry, without yielding to the conviction that the phenomena, obscure and indirect as they are, were the effects of an outward physical cause. That physical cause or force is not magnetism, for a crystal is as productive of the effects as a magnet, and a crystal is not magnetic. It is not crystalism, if the reader will tolerate a bad new word for once, for amorphous or uncrystallized matter is also effective in this way. It is not light; it is not heat; it is not electricity: neither is it chemical affinity, nor gravitation, nor anything peculiar to organization. It is nothing that we know otherwise than in and by those new observations. The author of the investigation under review considers it to be a distinct and universally diffused force, the common accompani-

ment of all those better known cosmical powers. In compliance with an old and established method in physical science, he refers the phenomena to the external agency of a new imponderable fluid, analogous to, yet differing from caloric and its congeners; which he christens by the name of odyle; a word perfectly synonymous with animal magnetism. Before proceeding to the criticism of the ingenious Baron's views of the natural history and physiological scope of this cosmical force, it is necessary to examine another series of his experimental observations.

The animal-magnetists have been proclaiming, during the progress of more than half a century, how the more susceptible of their patients declare that they see rings and haloes of light playing round the heads of their magnetizers, or such as are placed *en rapport* with them; strings of light passing towards them from those by whom they are being swayed; lambent glowings of light investing those to whom they are drawn by sympathy; 'glowings, glowings everywhere, but ne'er a ray to see by,' to paraphrase a memorable distich of the *Anciente Marinere*. Without express reference to these allegations, but guided by some dim conjecture concerning the nature of the northern and southern lights or auroras, our experimentalist requested the father of one of his earliest and most sensitive patients to place a powerful horse-shoe magnet before her during the night. She immediately perceived nebuloid lights or flames flickering upwards from the poles of the instrument. This was the beginning of a long run of singular experiments of the same kind. All sorts of patients were found to see similar lights; odylic flames, odylic threads, odylic vapours. Some saw them rising from the same magnet to different heights and of different colours. They saw them playing round the poles of crystals, emanating from finger-tips and lips, rising in fact from everything. They saw them not knowing they were to see them. Their descriptions did not jar with one another. Cataleptic girls, people of good culture, men of science agreed in their reports. In one instance the flames from a very powerful magnetic pole were some ten inches high. Chemical action, sunlight, &c. all sent such flames through wires in such a manner that a patient, confined in a pitch-dark chamber, saw them issuing from and playing around the extremities of the wires, introduced through the luted key-hole. A little globe or *terrelle*, with a good straight magnet in its interior, as an axis with its pair of poles, suspended from the ceiling of a dark room, gave a mimic semblance of the earth and its auroral lights to the sensitive. In short, not only the old-world stories about corpse-candles and ghosts hovering over graves, but the phenomenon of the aurora are at length explained—to the satisfaction of this experimentalist.

Now, apart from Mr. Braid's finding that precisely such lights are perceived by exceptional people under the influence of suggestion and expectant attention, and accepting the amazingly congruous perceptions of Reichenbach's sensitives as the effects of an external physical cause operative in magnets, metals, crystals, planets, suns, plants and animals, there is an all-important remark to be made concerning them on the very threshold of his theory. It is this: the sensations of coolness and warmth, as produced indirectly by the same agents, are not correspondent with external phenomena of temperature. He has said so himself. They are real as perceptions, not as sensations; they are tactual illusions. By a parity of reasoning, these perceptions of light are not real as sensations; they are real only as perceptions. They are not correspondent with external phenomena of light. They are the parallels, the analogons of the quasi-sensations of coolness and warmth. They are optical illusions. A fact must be judged by its peers; and, if the sensations of heat and cold produced by a magnet or a crystal are only quasi-sensations or spectres, then the sensations of red and blue produced by a crystal or a magnet are only spectres and quasi-sensations too. This at once explains how one sensitive should see the flames three inches, and another see them ten inches high, though issuing from the same pole of the same magnet; for when a dim-sighted person sees an illuminated disc, he does not see it as of half the size it presents to the eye of one who sees twice as well, but of half the degree of illumination. It explains how 'even Bollmann,' as Reichenbach frequently says of his one blind patient, should perceive the odylic lights just like another. In fine, it explains all the little discrepancies between the reports of the sensitives, while it does not contravene the remarkable amount of similarity or identity of these reports; for spectral illusions, (whether arising wholly within the nervous-system, as in *delirium tremens*, or drawing one of their origins from without, as in these memorable experiments,) are the orderly exponents of law, just as truly as any other natural phenomena. But this view also excludes and rejects the Reichenbachian hypothesis of the aurora, unless the hypothetist is prepared to defend the still more novel proposition that the aurora is an optical illusion, quite as visible 'even to Bollmann,' as to those who have eyes! In truth, even if we reciprocated his belief concerning the common reality of his odylic radiance, we should deeply regret that he should have ventured to leap the gulf which separates the sheen of magnets and crystals, perceptible only by the exceptional, from the classical and published glories of the polar light. But we do not reciprocate that belief. On the other hand, we entreat his disciples to take notice that parity of reasoning, just

analogy, and the right rule of induction compel the critical mind to place the odylic lights on the same level with the odylic heats and colds; which latter the discoverer himself perceives and states, but without precision, to be illusory as sensations, though real and constant as perceptions.

I have said nothing about Reichenbach's attempt to furnish something like a physical proof of the optical nature of the odylic flames, threads and smokes; and that simply because it is utterly unsatisfactory. His friend Carl Schuh, an expert heliographist, shut up a prepared silver-plate, with a magnet before it, in a dark box; and another without a magnet, in a dark drawer. After some hours the former was found, by exposure to mercurial vapour, to be affected by light; the latter not: 'but the difference was not very great.' Why were the plates not in exactly similar dark boxes or drawers? 'A dark box' and 'a dark drawer' are worth nothing whatever in an experiment so infinitely dainty as this. Schuh next placed the magnet over against a plate, within a box wrapped in thick bedding; and after sixty-four hours the plate, on exposure to the vapour of quicksilver in the dark, showed the effect of light over its whole surface. Why were not two plates, one with and the other without a magnet, and in equally dark boxes of course, employed in this experiment? And why was this most legitimate and comfortable species of experimentation not prosecuted any farther? Certainly these two poor experiments prove nothing. The experiment with two plates lasts a few hours; the experiment with only one, and therefore without a check, lasts sixty-four: the check in the former was rendered null by want of care about the box and the drawer; and there was no check provided in the latter. The experiments of Mr. Braid are much better.

They were made with nine plates, prepared by Mr. Akers of the Manchester Photographic Gallery, a man professionally engaged in daguerreotypic experiments, and therefore quite as likely to be an adept as Herr Schuh. Three of the plates were exposed to the action of a powerful horse-shoe (originally able to lift eighty pounds, but somewhat reduced by use) in seclusion from light. Other three were treated precisely in the same manner, only two sheets of black paper were placed between the magnet and the plates, so as to intercept the real or supposed radiance of its poles. A seventh plate was confined in a box at a distance from the magnet. They were all kept in these several circumstances from sixty-six to seventy-four hours; but in no instance was there any appearance of the photographic action of light, the only changes being such chemical modifications of the surfaces, 'as generally arise from keeping prepared plates for some time before exposing them to mercury.'

Now it is to be noticed that these are three positive results. Those of Schuh, such as they were, were at the best only negative ones. In his two experiments, it is not the least impossible but that common light reached the plates; and it does not appear that he was on his guard against those chemical changes which 'generally arise from keeping prepared plates for some time.' But in the experiments of Braid and Akers, metallic sensitives were positively and indubitably submitted to the prolonged action of a powerful magnetic force, but no photographic effects ensued. This is the positive observation, not that; although at first sight it seems to be the reverse. In every point of view, in fact, the experiments of the Manchester surgeon are greatly superior to those of the Viennese authority on meteoric stones; and they settle this part of the question in the meantime. It is of course quite possible that Reichenbach, or some other experimentalist, may yet adduce photometrical evidence so luminous as to throw all objections and objectors into perpetual shade; and therefore let us all be prepared to give it a scrutinizing, but a hearty welcome.

But Reichenbach made another experiment with a lens; an experiment, however, not a whit more physical and positive because of the use of an optical instrument. It had an opening of about eight inches, a focal distance of about $12\frac{1}{4}$ for a candle at 59. In a dark room he placed the magnet, whose flame was $10\frac{1}{4}$ inches high to Madlle. Reichel, the subject of this experiment, behind the lens at the distance of about 25 inches, directing the axis towards a wall to which he called the attention of the patient. It was found necessary to withdraw the lens gradually to the distance of 54 inches from the wall, during which process Reichel saw 'the image' constantly diminishing, till it had shrunk from $10\frac{1}{4}$ inches to the size of a lentil. She placed her finger on the place where she saw the focal image; the experimenter felt for her hand, and placed his own finger on the spot. He then desired an assistant who held the lens, to shift its direction without saying how. The girl instantly pointed out another spot. The observer felt for it, placing his finger on it, and desiring the assistant to tell him in what direction the lens had been moved. His finger, he says, was always found to have been placed in the direction indicated; whether to the right or to the left, upwards or downwards. This experiment was subsequently repeated with a very large lens, made at Paris on purpose, upon a great number of sensitives with similar results; and those results are doubtless all true as facts.

Yet they are quite unsatisfactory as bearing on the point now at issue. Nobody who is conversant with medical psychology, or knows anything of the phenomena of spontaneous somnam-

bulism, or is aware of the power of direct or indirect suggestion over mesmeric patients, even over highly educated men apparently quite self-conscious, can attach any value to them. The more intelligent the sensitive the worse; for he will just understand the suggestions of the apparatus and the experiments all the better, and expectant attention will have all the fuller swing. Moreover, if a sensitive sees such lights emanating from the magnetic poles, and from her own person, and from the experimenters, and from the lens, and from everything else, as are described in other parts of this piece of research, why, the dark chamber can hardly be dark to her. Lastly, 'right and left, up and down,' and all such vague indications are surely far below the mark of scientific accuracy, as it is practised and demanded in these days. But here appears the avenging Nemesis of Reichenbach's contempt for the older mesmerists. If he had studied their works, he could neither have made nor published this set of his experiments. Braid the hypnotist would more especially have furnished him with both facts and thoughts for his guidance. Dr. Holland, who is neither hypnotist nor mesmerist, would have put him on his guard against the effects of expectant attention on certain exceptional nervous systems. In fine, our otherwise accomplished investigator would have been all the better for a little more knowledge of the physiology and the pathology of the cerebro-spinal axis, considered as the instrument of the mind, and a little less knowledge of meteors. At all events, these experiments with the lenses will carry conviction into the judgment of neither physicist nor physiologist, especially if he be cognizant of the phenomena to be evoked in the mesmerized nervous system by a word, by a sign, by absolutely next to nothing; and still more especially, if he have seen how perfectly self-conscious the possessor of such a nervous system may appear to be, even when seeing water become white, a handkerchief turning into paper, and so forth. If Baron von Reichenbach were to intermit his experimentations in this department for a year or two, as being dazzled and bewildered by the strange things he has seen with the astonished eye of his mind; and if he were to occupy the interval with the study of the phenomena of morbid psychology as shewn in the sleepwaking, mesmeric, and partially hypnotic states, the second edition of this great work of his would probably be as superior to the first, in all the qualities of scientific and literary organization, as a psyche to its chrysalis, or the chrysalis to its original worm.

It is unnecessary to say anything concerning this author's observation, that a cataleptic limb frequently follows a magnet or an operator's hand, as if it were attracted by them; for it has often been as well made and better stated. It is astonishing

that, knowing as he does, that there is no mutual attraction between the magnet and the cataleptic limb, he should not have defined it as an irresistible following of the removed magnet on the part of the limb. This phenomenon in fact, considered as a phenomenon of motion, is altogether subjective in the patient. According to our experimentalist himself, a magnet suspended from one end of a beam and balanced by weights at the other, never moved when a cataleptic hand was tending towards it with much force, was allowed to approach close to it, and was hindered from touching and clinging to it only by the stronger arm of the operator. The magnet does not draw the hand, but the hand seeks towards the magnet; and an experimenter's fist or a large crystal is as good as a magnet.

As for the facts recorded concerning the discomfort experienced by some sensitives from lying in any direction but that of the magnetic meridian, with their heads northwards and their feet southwards, they are very curious and important; but they still retain all the characters of isolated and unexplained facts to our mind. If they be referable to any animal-magnetic or other physical law, one should expect to find it hinted, if not strongly set forth in the instinctive habits of the living world; but the author frankly confesses there is no such indication in the common history of nature. Since Faraday has proved that the body of man is a diamagnetic, in all its parts and as a whole, the direction of east and west should be the most suitable for repose, always supposing the magnetism of the earth is strong enough to act upon a sleeping animal at all. This is also the proper place to mention that Reichenbach appears to suppose that his odyle and the London discoverer's diamagnetism are one and the same thing. Dr. Herbert Mayo understands him to say so. Inasmuch as we cannot understand the meaning of this claim, opinion, conjecture or scientific hope, we cannot criticise it. North and south and east and west, longitude and latitude, are certainly at right angles to one another!—But it is clear that we do not comprehend the meteorologist's ideas on this point, so that it will be better to proceed at once to the criticism of his doctrine of odyle.

Carefully remembering then that the heats, colds, and luminosities of this whole investigation do not correspond with any real external phenomena of temperature and light; yet allowing that the perception of them as quasi-sensations or sensuous illusions is initiated by some occult action on the exceptional nerve, it remains to be considered what the agent of that action is in itself. It is resident in everything that is material; it is more potent in matter that is more active, in crystals, in light, in chemical mixtures, in magnets, in the living body; it is peculiarly

energetic in mighty magnets, and in a kind of mighty men. Wherever there is more than ordinary atomic activity, or wherever the sum of that activity in a single form is made to drive in one direction by polarity, as in the magnet and the crystal, there this obscure action upon the exceptional nerve, this *cœnæsthesia*,* as Feuchterleben the great medical psychologist would have called it, is more than ordinarily made manifest. Of its *cœnæsthetic* effects we know absolutely nothing, except in and by means of the sensuous illusions it gives rise to in some roundabout manner, of which also we know nothing. Now all nature is quick with motion, all nature throbs and thrills, all nature is phenomenal. Suns blaze and rotate, planets rotate and revolve, atoms never rest. The coldest stone is as full of movements, actions, and reactions as the milky way. How much more intense the interior phenomena of a regular crystal with its pointing axis and poles, an energetic magnet, a plate of metal with the sun flashing on it, the chemical bucket, an ever-unfolding tree, the body of a breathing man! Every footfall is propagated through the universe. Did it descend on the snows of Siberia, it would penetrate to Peru in a trice, and pass on for ever. It would institute motions in every nerve in Christendom. Suppose that instead of a footstep it were an earthquake, is it not very easily conceivable that the exceptional nerve should be obscurely sensitive of the shock, not so as to recognise it for an earthquake or a shock, but so as to fashion forth for itself a sensuous illusion pointing to the north-east, a flash of light or a glow of heat? In a precisely similar manner do we think that the ordinary atomic energies, which are common to all animal magnets, are quite competent to the commoving of the exceptional nerve in such a manner as to yield spectral glows and coolings, lights and shades, however vivid these may be to the perception of the unfortunate subjects. The inward stir, the wondrous and incalculable inward stir that is ceaselessly going on within the body of the so-called animal magnet, excites an inward stir within the substance of the exceptional nerve, and that stir bodies itself forth through the said exceptional nerve to its percipient owner as a cool aura, a warm breeze, a luminous flame, a thread of light, a phosphorescent vapour:—or what not! In other words, the common nerve of man is reactive on the whole of nature; especially on the more energizing forms of nature, the magnet and so forth, but not in the way of sensation, or any thing that simulates the nature of sensation: whereas the exceptional nerve is all the more reactive on those highly energetic natural forms, but that not in the way of direct sensation either, only in the way of in-

* Hidden, secret, latent, or dark sensation.

direct quasi-sensations or sensuous illusions of remarkable regularity of character. This simple view of the matter explains everything connected with the subject; the peculiar action of peculiar substances or classes of substance, idiosyncratic aversions to certain forms of matter, nervous sympathies and antipathies, and so forth. Now it is the great rule of the inductive hypothesis, that the investigator invent nothing new if possible; it is the second, that he adduce the minimum of causation for the maximum of effect; and it is the third that he proceed from the known to the unknown. It is humbly submitted that the doctrine now explained fulfils these conditions.

Reichenbach, however, has devised and promulged quite another doctrine, which seems to comply with only the last of these rules. He refers the cœnæsthetic effects under discussion to the agency of a new imponderable or dynamide. This new fluid or force is distinguished from caloric, electricity, magnetism, and their congeners, by the name of odyle. Apart from hypercriticism of the notions commonly entertained concerning the nature of the so-called imponderables or dynamides in general, and allowing the usefulness of such language as corresponds with these notions in the meantime, we can only say that we do not see the necessity or convenience of creating this new sort of matter or material power; and those who have followed our strictures on the facts of the case with their approval will assuredly say the same. We acknowledge neither the thing nor the name. The former is *non-inventum* and unnecessary; and the latter is as odd as it is ill compounded.* They are both of them intellectual illusions in our opinion, struck out of the investigator by his observations:—*et præterea nihil*.

The author indeed endeavours to substantiate his odyle by investing it with a show of polarity, and setting it forth in all the algebraical and Arabian dignity of plus and minus, and dressing it out in the point-lace of positive and negative,—thesis, mid-point, and antithesis. This part of his researches appears to be a signal failure. Heat and cold are not polar opposites; the latter is the negative of the former in a very different sense from that, in which the chloroid pole of a galvanic battery is negative to the zincoïd one. They are not anode and cathode, they are not positive and negative, two yet one, opposites not different, in the physical sense of these terms. Neither are light and darkness; still less are red and blue. Yet the only indica-

* Men of science are sometimes, if not generally, but indifferent hands at the making of words. Chloroform has been dubbed an anæsthetic agent! An anæsthetic is an insensible; but chloroform is neither sensible nor insensible; it only renders its inhaler insensible.

tion to be found in our author's experiments, that his (invented) odyle is bipolar in its manifestations is the fact that heat and cold, red and blue, are produced as quasi-sensations in the exceptional nerve by the actions respectively of the poles of a magnet, the poles of a crystal, sun and planet, right and left of the human body, oxygenoid and potassoid bodies, and so forth. That the opposite poles of a magnet (and so forth throughout the list) should produce different cœnæsthetic effects is what might be expected. It tallies with all experience. But these effects, coolness and warmth, do not stand in polar opposition to one another after all ! Moreover, the experimentalist should have remembered that his sole reagent, namely the cerebro-spinal axis of a sensitive, is confessedly and notoriously a bipolar instrument. It is therefore our distinct opinion that the very superficial semblance of bipolarity, observable in the cœnæsthetic effects of crystals and other animal magnets, are derived partly from the polar relations of the agents, and partly from the manifestly bipolar constitution of the nervous systems of the reagents, from Reichel and Nowotny up to Endlicher and Kotschy, to say nothing of the duality of the cerebro-spinal axis of the observer himself. At all events, the inherence of bipolarity in a force so dimly and remotely hinted by experiment as this, even supposing it to be nothing less than a new cosmical power, must be established on incomparably more outward and positive grounds than the quasi-sensational reports of exceptional women and men.

Such is a candid criticism of this singular piece of work from the point-of-view of a positive, that is to say an inductive methodology ; and we trust it has been expressed with good nature and respect. In case any reader, going along with the experimentalist in all his judgments, should think some of our phraseology is touched with the spirit of levity and some of it too caustic, we beg to repeat the assurance of a profound regard for the accomplishments, the ability, and the courage of the inventor of odyle. It is confessedly a miserable thing to think that a laborious and self-denying man shall spend years of toil in working out a difficult subject, only to be criticised by people sitting at their ease in their studies ; and we should feel our present task to have been ungracious in its very nature, and even somewhat insolent in its performance, if we did not heartily desire, and now strongly express the wish, that everybody who has perused this commentary should also read the book commented on. Nor is it possible for the student of positive science to forget that, although an experimental subject may be open enough to critical objection in its earlier stages of development, another day's work or a single new experiment on the part of the explorer may cover

the handless critic with confusion of face. Talk is nothing to work, and speculation is less than nothing to fact. The only thing that becomes men like our present experimenter is to tread right forward; coolly, firmly, slowly, and surely. In some propitious hour he may discover a purely physical reagent upon odyle; and thereby not only silence the conscientious critic, who will rejoice to hold his peace; but also bring to open shame that curse of science, the man that 'sits in the chair of the scorner.'

Nor must the reader whose bad passions may perhaps have been gratified by the body, if not by the spirit of this critique, conclude that little or nothing remains in the book after such large deductions as have just been made. Very far from that. Supposing the author and his disciples ready to grant that the odylic lights are as spectral as the odylic heats and colds, that the existence of odyle is the most questionable thesis in all the literature of experimental science, and, in fine, that every one of our objections is founded, there would still remain a massive body of new matter. So extensive, orderly, and authentic a narrative of sensuous illusions is an invaluable contribution to the science of medical psychology. But that is not all: for this investigator has established the proposition, that the whole of nature is reactive on the nervous-system of man, on a breadth of basis which cannot be shaken; there being no matter, considering the thing as a discovery of fact, whether that influence be exerted through the medium of a new dynamide, or by the propagations of the well-known cosmical powers of matter. The idea of this proposition is as old as the doctrine of the macrocosm and the microcosm; it entered into the conceptions of astrology; it was a favourite with the Rosicrucians; it was a grand point with Paracelsus; it began to shape itself into a distinct hypothesis within the mind of the elder Van Helmont; it at length derived a local habitation and a name from Mesmer; and the affirmation of that unfortunate physician has now received immovable confirmation from the careful observations of Baron von Reichenbach. This will, of course, be understood to be said only of the bare and simple proposition stated above; because, as for the hypothetical entities entitled animal magnetism or odyle, whether singular like caloric or dual like electricity, we reject it and its attendant speculations altogether:—until such not impossible evidence of its individual activity be discovered and brought forward, as no experimentalist shall be able to withstand.

It has just been remarked, in the second last paragraph, that the discovery of some purely physical reagent upon the (so-called) animal-magnetic or odylic fluid would settle the question for ever. Such an instrument, or rather something professing to be

such an odylometrical apparatus, has actually been found out and offered to the world of science since the present year began ; and it therefore behoves us to examine its claims with impartiality and rigour.

Dr. Herbert Mayo was once well known in this country as an anatomist. Certain observations on the brain gained him a distinct reputation ; and he lectured in University College, London, for some time, with acceptance. Of late years however, unfortunately for advancing science, this distinguished physician has been invalided at Boppard on the Rhine. Completely crippled by his malady, he presides over an establishment for the water-cure, and beguiles the day with literary and scientific pursuits. Among other things, he has written and published, from his sad retreat, a series of letters on the truths contained in popular superstitions. These interesting and open-minded epistles have lately reached a second edition.

It appears that the ingenuous doctor has become acquainted, in the course of his multifarious reading, with the experimental researches and the inferences of our friend the Baron von Reichenbach ; and, indeed, accorded them his cordial and unreserved belief and consent. So lately as the very last evening of 1850, he was introduced by a mathematical proficient, of the name of Caspari, to the mystery of that antique geomantic toy, the divining ring. After an hour or two's tuition in the higher mathematics, for this English invalid is too accomplished to be ashamed of being a scholar, the pupil and his teacher entered into a desultory chat about the divining rod and Von Reichenbach's book on odyle. The upshot of their gossip was as follows. Caspari had something to tell as well as Mayo ; and, what was still better, he had something to show. He wanted nothing but a piece of silver, a gold ring, and a thread of silk for his experiment. Having tied the ring to one end of the thread, he held the other in his hand in such a manner that the ring hung right over a silver spoon upon the table. The ring was not allowed to touch the spoon ; it was suspended half an inch above it. It soon shaped its first vagabond movements into regular oscillations, passing from and towards the body of the geomancer ; and it was at once evident to the valetudinary Englishman that this longitudinal libration must be akin to the motion of the still more venerable divining rod itself. But this was far from being the terminus of his inferential career ; for a maid was summoned to the thaumaturgical chamber, and she was desired to place her hand in that of Caspari which was free. No sooner had she done so than the oscillations of the hanging ring became transverse ; they went at right angles to their former direction ; they passed from left to right across the person of the mathematician,

instead of to and from him. In other words, to quote the too rapid and resistless conclusion of the old anatomist, 'an od-current had been established between the two experimenters, and the apparent influence of the two metals on each other had been modified.'

Without stopping to question this sudden connection of the swingings of his gold ring with the Reichenbachian talisman called odyle, Dr. Mayo plunged into the investigation of this new department of odylic science. He multiplied experiments, making as many as thirty supposed to be worthy of publication. For gold he substituted silver, lead, zinc, iron, copper, coal, bone, horn, dry wood, charcoal, cinder, glass, soap, wax, sealing-wax, shell-lac, brimstone, and earthenware; and he called a lengthy little chip of any of these substances, when hanging by a silk thread, an odometer,—thereby advancing a considerable way in his novel researches! In place of the silver spoon, he tried gold, glass, and other kinds of matter; and these he denominated od-subjects,—an eccentric enough procedure in inductive inquiry, but carrying the mind another step forward in the investigation of this foregone conclusion! For two or three days the odometers would not move over the od-subjects with anything like lawful regularity, but perseverance gained its legitimate reward. They began and continued to vibrate, and sometimes to rotate, with the most exemplary certainty. In ten days Caspari and his disciple 'succeeded in disentangling the confused results which attended their first experiments.' The literary doctor wrote down thirty observations of how odometers moved longitudinally, transversely, obliquely, round and round, according to their own inherent natures, to those of the od-subjects over which they were held, to the relative positions of these to those, to the relation of the operator with a person of the opposite sex, and so forth over several otherwise valuable sheets of writing-paper. Zealous of good works, he swiftly embodied his discoveries in a posthumous letter, to be printed for Blackwood and Sons, and circulated among the possessors of his book.

It is worth while to consider this seminal experiment a little: for it is the germ from which the aforesaid thirtyfold structure has developed itself after the morphological fashion in botany, that of self-repetition; in the present instance, however, the clumsy and uninventive self-repetition of the cactus. The first thing that puzzles the simple-minded reader is the difficulty of understanding how, according to the instantaneous perception of Dr. Mayo, the residence of odyle in the ring and spoon even in the state of polar opposition, or the passage of odyle from the experimenter down the thread, or its leaping the half-inch gulf between the gold ring and the silver spoon, or the odylic disturb-

ance produced by the maid's laying her hand in Caspari's free one, should any or all of them produce mechanical motions of either one sort or another. There are only two directions of mechanical force that we know of, attraction and repulsion. Did the ring draw towards the spoon, it would stand stock still; all the stiller, in fact, for this supposed odylic attraction, superinduced upon the common downdraught of gravitation. Did they repel one another, their mutual repulsion would be in right and not in oblique antagonism to the attraction of gravity, and continued repose is the only conceivable resolution of two such forces. Besides, Reichenbach has not adduced a single effect of mechanical movement as produced by his supposed new dynamide: and he certainly never dreamed of such an eccentric development of the idea of motive force, as shot up within the mind of the English resident at Boppard, under the sight of the mathematical teacher from the gymnasium and his ring; and that in less than a night, like the *bovista giganteum* in a loose, light, and damp soil under the spectral touch of the moon!

The phantasmagorial nature of his initiative idea, however, did not diminish the ardour with which the friend of odyle pursued his experiments; it rather acted as a stimulant to his enthusiasm. And it cannot be denied that experiments may be good and sufficient, even when the hypothesis from which they are studied is as incongruous as a dyspeptic's dream. A gold ring with a plain stone was his first odometer, but he eventually had recourse to an inch of shell-lac, broader below and lancet-shaped throughout; hanging the thread over the first joint of one of his forefingers for the most part.

Then here are the results:—

I. Odometer (we will suppose armed with shell-lac) held over three sovereigns heaped loosely together to form the od-subject; the odometer suspended from the forefinger of a person of either sex. *Result*—Longitudinal oscillations.

II. Let the experimenter, continuing experiment I., take with his or her unengaged hand the hand of a person of the opposite sex. *Result*—Transverse oscillations of the odometer.

III. Then, the experiment being continued, let a person of the sex of the experimenter take and hold the unengaged hand of the second party. *Result*—Longitudinal oscillations of the odometer.

IV. Repeat experiment I., and, the longitudinal oscillations being established, touch the forefinger which is engaged in the odometer, with the forefinger of your other hand. *Result*—The oscillations become transverse.

V. Repeat experiment I., and, the longitudinal oscillations being established, bring the thumb of the same hand into con-

tact with the finger implicated in the odometer. *Result*—The oscillations become transverse.

VI. Then, continuing experiment V., let a person of the same sex take and hold your unengaged hand. *Result*—The oscillations become again longitudinal.

VII. Experiment I. being repeated, take and hold in your disengaged hand two or three sovereigns. *Result*—The oscillations become transverse.

VIII. Continuing experiment VII., let a person of the same sex take and hold your hand which holds the sovereigns. *Result*—The oscillations become longitudinal.

And so on through other twenty-two experiments; the last three being made with a glass odometer.

He can vouch for being able to reproduce unfailingly the recorded results of only the first twenty-seven experiments however. He had been in doubt as to the genuineness of the whole hypothek of them in fact; they were so contradictory and capricious for some days. But the interest of these experiments is now very considerable, he says. They seem to him to contribute a mass of objective and physical evidence in favour of the subjective results of Reichenbach's experiments, and add something to the cumulative demonstration that there exists some such universal force as odyle. 'And such a universal force,' exclaims this disciple more generous than his master, 'what other can we deem it to be than the long-vilipended influence of Mesmer, rendered bright, and transparent, and palatable, by passing through the filter of science?'

It is quite possible, beforehand, that these thirty experiments may be as genuine in their essence, as they are undoubtedly true in the report of them; and, before criticising them, we shall relate other three experiments of our own.

I. Being men of firm nerves, and perfectly self-possessed in so far as the body is concerned, having never suffered from any neuropathic disease in our lives; always having failed in getting hypnotized or mesmerized, though ever so willing; not to be swayed by the suggestion of circumstances or of other folk; but strongly mesmeric, if there be such a quality, we repeated Caspari and Mayo's preliminary experiment. We hung a good gold ring from the first joint of our right forefinger, by a white silk thread, over a silver spoon; holding the so-called odometer half-an-inch apart from the odylic subject. After its first vague movements were brought to rest, the ring stood still; it never budged. This looks like a mere negative experiment at first sight, and negatives go for nothing: but it is not; it is the positive experiment in this case. Owing to the unsteadiness of most hands, owing also to the pulsative movements and nervous twitchings of

most fingers, the difficult thing to do is to hold any object still. Our ring will sway to and fro at the end of its thread, in fact, when hanging from nine fingers out of ten. If, however, a tenth one be found which is able to hold it suspended in perfect stillness, there is then discovered a positive proof that the movements in the other nine cases must have been owing to nothing that is 'physical and objective.' Considering the matter as a question of motion or no motion, Caspari's experiment is negative although it affirms, and ours is positive although it denies. If there be such a motive force, free to operate its effects in such circumstances, as Dr. Mayo asserts, then no property of ours could interfere with its action. We could as easily hinder the ring from falling to the extent of its tether, in obedience to terrestrial gravity, as control the odylic impulsion, if there were such a thing at work within, through, and upon the so-called odometer. Any properly qualified person can repeat our experiment.

II. We summoned two ladies to witness the experiment repeated. No sooner had the ring come to rest than it began to move again, and that no longer vaguely. It swung to and from us along the line of the spoon; but as soon as one of the fair testators laid hold on our unoccupied hand it stopped, only however to vibrate transversely. The thing was repeated with the same results: it oscillated longitudinally when we were sole and singular; transversely whenever either of the ladies gave us her hand. We bade them observe how fixedly we held our uplifted hand, and they observed it. But, to tell the reader the truth, we produced these motions of the ring by means of infinitely trifling and imperceptible movements of our hand; and without any difficulty we could suffer the tricky pendulum to fall to rest whenever we chose. This is certainly not the manner in which Dr. Herbert Mayo's librations, longitudinal and transverse, were brought about; but this purely negative experiment is described for the purpose of showing how very minute and unobservable movements of the hand and finger can work wonders.

III. We suspended the odometer from a fixed point by its thread, and let it fall to rest. We then held a silver spoon, a plate of porcelain, sealing-wax, and several other odylic subjects under it in the air, half an inch from it, a quarter, a twelfth, but all in vain: no motions ensued; no phenomenon of any sort took place. Now we think that this is precisely the same experiment as Caspari's, considered as 'physical and objective;' and it is strange to think that an English doctor did not at once reverse it in this style. If odyle go down the thread, it goes through the spoon. It cannot matter whether the odometer or the odylic subject be in the hand of course, else the experiment is neither

objective nor physical. This is certainly a crucial test, and it needs no ghost to predict that not one of all the doctor's variations of his mathematician's geomantic performance will bear its application.

At the same time, the regularity and reckonable certainty which attended these Boppart experiments, after a few days (be it always observed) of contradiction and caprice, is very interesting, when considered from the right point of view. It is as clear as crystal that the results became expected things. Many of the experiments indicate a foregone conclusion. All of them would become such after the first satisfactory trial. Now we have seen that the most minute and invisible movements of the hand communicate certain oscillatory motions to the suspended body; and we also know something of the power of expectant attention and extrinsic suggestion over certain nervous systems, especially the hypnotizable. It appears that Dr. Mayo is the subject of the mesmerizable diathesis or habit of body: the disease under which he labours is almost a completed proof of it. Nor would any one venture to speak in this manner of his condition, but that he has adduced himself as the instrument of a scientific investigation, as well as its author. That instrument, although it is the sick body of a most excellent and valuable man, must therefore be judged as freely as if it were a symple-someter or an electric clock. Be it understood, then, that a mesmerizable nervous system holds a thread with a light body at the other end of it; that the most infinitesimal movements of the suspensive point of that nervous system are able to institute librations of the light figure suspended; that the direction of these librations is under the control of the will of a wholly self-possessed experimentalist; that the expectant attention of another sort of nervous system in the operator is calculated to bring about its own results in the matter of direction—and this posthumous letter on the truth contained in popular superstitions is both refuted and explained.

The intellectual under-current of motive in these unproductive experiments is good and true. Their distinguished author expresses, through means of them, his opinion that the experiments of Reichenbach are hitherto purely subjective, to use that adjective in the limited sense frequently put upon it by English writers. It is evidently his conviction that physical and objective manifestations are necessary to the establishment of the existence of an imponderable or a dynamide, which professes to be objective and physical. Neither is Dr. Mayo blind to the fact that odyle is nothing more nor less than the animal magnetism of Mesmer, whether animal magnetism be a new specific force or a nerve-stirring resultant of the general cosmical powers of nature.

The most important of these indications is certainly the perception that nothing short of a physical instrument, an odometer in fact, will ever establish and illustrate the thesis of the Baron of Castle Reisenberg. In short it is the one urgent, commanding, unmistakable, and unavoidable duty of Von Reichenbach to suspend his operations on the exceptional nerve, and betake himself with stout and eager devotion to the invention of an odyloscopic apparatus. It were in vain to say that the exceptional nerve is the only reagent and test of odylic action; for if such be the case, it differs from all the family of dynamides in a very central particular, and that is a sad argument against it to begin with. It were almost as absurd as to speak of a new gas, supposed to want the property of weight. To imagine that, though gendered and resident in all sorts of unorganized matter, as well as in plants and animals, it shows its existence only through the exceptional nerve, is all but equivalent to shutting it out of the society of the imponderables altogether. Gravity, cohesion, affinity, heat, light, electricity, galvanism, and honest old magnetism disown it in such a case, and it must just found a family for itself. The indefinite hope is not to be abandoned, however, that Reichenbach himself, or Professor Gregory, or Dr. Herbert Mayo will yet construct a true odometer, and thereby exult victoriously over all us sceptics and critical house-dogs. Io triumphe!

- ART. VII.—1. *Report from the Select Committee on Public Libraries, together with the Proceedings of the Committee, Minutes of Evidence, &c.* Ordered to be printed 23d July 1849.
2. *Report from the Select Committee on Public Libraries, together with the Proceedings of the Committee, Minutes of Evidence, &c.* Ordered to be printed 1st August 1850.

ON the 6th of April 1841, Mr. Ewart moved in his place in the House of Commons, "That an humble Address be presented to Her Majesty, praying that she will be graciously pleased to direct that some responsible Minister of the Crown shall yearly make to the House of Commons a statement of the condition and prospects of the education of the people." This was in other words moving for the appointment of a Minister of Public Instruction. It is hardly necessary that we should inform our readers that the address was *not* presented to Her Majesty. In the course of the arguments by which Mr. Ewart supported his motion, he alluded in marked terms to the importance of the establishment of Public Libraries. The motion itself failed, but the discussion was not altogether barren of results, and the subject of public education being constantly kept before the notice of the House of Commons by the Committee on the Fine Arts, the Public Museums Act, and in other forms, Mr. Ewart succeeded, on the 15th of March 1849, in obtaining the consent of Sir George Grey to the appointment of a Committee "on the best means of extending the establishment of Libraries freely open to the public, especially in large towns, in Great Britain and Ireland." The only restriction imposed upon the Committee was, that it should not enter into any inquiry respecting the British Museum, the constitution and management of that institution being then the subject of investigation by a Royal Commission.

The result of the inquiry by the Committee of the House of Commons is now before the public, comprised in two Blue-books—the one issued in the year 1849, and the other in 1850.

The Minutes of Evidence present a great deal of curious and most interesting matter relating to the state of education among the poorer classes of society in the three kingdoms, and the efforts which have been made from time to time to infuse among them a love of reading, and to supply them with the means of gratifying the taste when acquired. These Minutes also shew that much time and labour have been bestowed upon inquiries foreign to the subject before the Committee, and of which the

greatest praise would be to say that they were aimless and worthless.

The attention of the Committee was very much directed towards the benefit likely to accrue from the formation of public libraries to the classes lowest in the scale of education. And here, not only the direct evidence of some of the witnesses, but the natural inference to be drawn from that of all who spoke with anything like experience upon the subject, was, that public libraries must be considered and treated as ancillary to a good and comprehensive scheme of Public Education. The mere fact of being able to read is not sufficient. There must be a certain degree of mental cultivation before books, that is, good and useful books, will be relished. And here is the difficulty with what are termed the lower orders. We do not speak now of journey-men mechanics, or those who are in the receipt of regular wages, and who are thus raised above the lowest level: we speak of those whose means of living are casual, whose earnings are small, to whom the common decencies of life are strange, and who consequently are more particularly exposed to the temptations of idleness and want. It is not enough to say to such persons as these, "There is the public library; go and read; ask for the book you want, and it will be given to you." They must be coaxed into a respect and liking for books. On this point the evidence of Mr. Mackenzie, the rector of St. Martin's-in-the-Fields, and that of Mr. Brereton, his curate, is most conclusive and highly encouraging.

It appears that Mr. Brereton was in the habit of giving religious instruction to the inhabitants of a locality called White Hart Court, in Whitcomb Street, inhabited by "the humblest of the working people." Being anxious to improve their social condition, and conceiving that this could be accomplished by cultivating a taste for reading, and giving them something which they could enjoy in common, "he took a room in White Hart Court, he then got together some books, and little subscriptions were made, and he got together a library of about 400 volumes. The parties who used it were all of the humblest classes; they were admitted upon paying a subscription of one penny per week. The library was open two days in the week. The rules were, that one month's residence in the Court was to entitle them to become members; that the curate of the district should be the secretary, and have charge of selecting books and admitting members." In a letter addressed to Mr. Mackenzie, (produced by that gentleman in the course of his examination by the Committee,) Mr. Brereton gives the following particulars of the working of his scheme:—

“You will remember that the library which I opened in White Hart Court was intended as an experiment to try whether by that or similar means a greater degree of neighbourly good feeling might not be produced than generally exists among the working-classes in towns; at the same time I hoped that it would give me access as clergyman to that large class of artisans over whom religion has apparently so little control, who being extensively (as I believe) organized into clubs or trade associations, from which all the better influence of the upper classes is excluded, are not only a depraved, but also a very dangerous portion of society. I merely remind you of this, as I think it is probable that, the object of my library having been rather social than intellectual, the experiment there made may not much illustrate the views with which, as I suppose, the Parliamentary Committee is making its inquiries. And yet, so far as it went, I think my library abundantly proved that the working-classes are ripe for much superior and more extensive information than that to which they have generally access at present. . . . While I was in town and able to be present on the library nights, I was able to keep some order and arrangement, but I have been told that during the few weeks it continued in operation after my leaving town, there was great difficulty in observing order and regularity, and this was one chief reason for its being suspended. Still, on the whole, I think the lists of attendance will prove that similar institutions on a sufficiently large and well-regulated scale would not only be useful but very acceptable to the working-classes. . . . Perhaps I may also remind you that the plan I should have recommended had I been well enough to remain at St. Martin’s-in-the-Fields, would have been to have had a central library under the charge of one efficient person, and in connexion with it to have opened a reading-room in each court and street, through which the books would circulate from the central depot. . . . You will see that the penny subscriptions of the White Hart Court Library amounted in one week to 10s. ; and remembering under how many disadvantages this was attempted, I think it will occur to you that there will not be much difficulty in making such institutions self-paying,” &c.—*Minutes of Evidence*, 1849, p. 133.

Mr. Mackenzie, in the course of his examination, gives it as his opinion, founded on his own experience among the poor, that a small payment on the part of the recipients is desirable, inasmuch as “they value much more highly that which they pay for.” This gentleman also thinks that they would have had very few subscribers if they had not been canvassed.

These appear to us to be pregnant passages. In this short history of a short experiment we learn how much may be done and how to do it. There is one part of Mr. Brereton’s letter which deserves particular notice, inasmuch as it points to the careful superintendence demanded by these libraries for the poorer classes, bearing also as it does upon the evidence of Mr. Imray, to which we shall refer immediately. Mr. Brereton

says, "I have been told that during the few weeks it continued in operation after my leaving town, there was great difficulty in observing order and regularity, *and this was one chief reason for its being suspended.*" It is to be regretted that such an experiment should have been suspended for such a reason. The benevolent projector of the scheme naturally calculated upon the softening and civilizing influence of a rational and instructive pursuit like that of reading. Mr. Mackenzie closed the library because the readers were noisy. Mr. Imray was not to be so deterred, and his labours were spent upon a class yet lower than those who inhabit White Hart Court. His testimony is so conclusive that we shall make no apology for the following extracts :

" Have you had the means of observing whether the poorest classes of the population show much disposition to avail themselves of facilities for reading?—I have taken lately the superintendence of a Ragged School in the Marylebone district, and in connexion with that school we have established a small library and reading-room, and those that have attended have attended with great regularity, and read the books with the greatest quietness and attention; the room is open every evening but one in the week.

" How many frequent the room?—There have been 100 there; at this season [May] generally only twenty or thirty.

" Of what age?—It is in the evening; those who attend in the evening are of the age of from sixteen to thirty or thirty-five.

" Do you throw it open to anybody?—To anybody without restriction; generally those who attend the library are the same who attend the school.

" They do not go there for the mere object of passing the time, or having a comfortable place to sit down in?—It is possible that they may begin from that motive, but having begun they get interested in the books, and they return to get books to read. Since the means of emigration have been provided for those classes, and many have gone from that school, the inclination among them for reading works which will give them information regarding the countries to which they intend to go has been very great.

" Is it not likely that they will imbibe more knowledge from books which they take up themselves, provided those books are well chosen, than from any other source?—I think so. I may add, that a great number of those same persons who frequent the Ragged-school library had been in the habit of reading before, but they had read the bad cheap publications which had circulated in thousands among those classes. I may say that among those classes there is perhaps a greater amount of reading than among the better classes in London, but it is reading of the worst description.

" You think the institution of good libraries would withdraw the population, and especially the most dangerous part of the population, from bad reading, to which they at present apply themselves?—I think it would have that tendency, and not only withdraw them from worse reading, but from worse pursuits.

“ How do the people conduct themselves in the reading-room ?—With the greatest order and quietness.

“ Although they may be very humbly born and very poorly clad ?—Extremely so ; and many of them persons who would, under any other circumstances, be most noisy and rude in their conduct.

“ Have you known persons who apparently came with habits of disorder gradually reclaimed, in consequence of reading in the library, to habits of order ?—I have known men of from twenty to thirty, who when they came smoked their pipes in the school-room, overturned the forms, and did all kinds of mischief, and now they are perfectly quiet and orderly, and they dress better ; instead of rags they come with whole clothes, (though of the poorest kind still,) and they sit down in the library with the greatest quietness and decorum, and read the books.

“ Is it possible for the class amongst which you benevolently labour to make a small subscription in aid of the funds for the library ?—I am afraid they are too poor for that ; we have to provide them almost with everything, in order to attract them to the school ; we are not only obliged to make them pay nothing, but we are obliged occasionally to give them an entertainment ; a supper or a tea-party. At first, when the system was begun they were very rude and unmannerly ; but now they behave with the greatest courtesy, politeness, and quietness.” *

Surely these are facts which cannot be too widely circulated or too frequently brought under the notice of those who desire to effect a permanent and radical improvement in the moral and social condition of the so-called lower orders.

There is another point connected with the effort to give the means of self-improvement to the humbler classes, to which we would particularly direct the attention of our readers—that of Itinerating Libraries on the plan of those established for a time with so much success in East-Lothian, by the late Rev. William Brown. According to the evidence of his son, the Rev. John Crombie Brown, the object of his father was “ to have a library within a mile and a half of every inhabitant of the county if possible. The plan was to station a division of fifty volumes in every village and hamlet where a librarian could be found ; those were removed at the end of two years, and a general exchange took place.” This system was commenced in 1817, and at one period as many as fifty of these libraries were circulating through a district twenty miles in length by fourteen or fifteen in breadth. For the success of such a plan as this, two things are requisite, an active and intelligent superintendent for the entire collection, and a zealous librarian in each village. Such officers are, doubt-

* Minutes of Evidence, 1849, p. 207.

less, requisite in every library—but they are peculiarly necessary, as we have before observed, for those destined for the poorer classes, who so frequently require to be drawn away from the low and sensual pleasures within their reach to a profitable employment of their leisure hours. Mr. William Lovett, than whom few are better acquainted with the habits and wants of the working-classes, says, in answer to the question :—

“ Do you know anything of itinerating libraries, which are established in villages in the country ?—I have not heard of them ; I think, however, that while every arrangement should be made for the population of the towns, that libraries for the population of our villages should not be neglected. I think an agricultural population and persons in remote districts stand most in need of information. I would respectfully suggest the formation of itinerating libraries for their benefit, the same to be circulated from village to village in rotation. Such libraries, containing 100 or 150 volumes, might be fitted up in a box form, and supplied with shelves, and a set of rules and catalogue put in with the books, and form a library when opened without any trouble to the person receiving it.” *

We have selected this part of the subject more especially for remark, for two reasons. In the first place, the evidence upon it is the most direct and satisfactory ; and, secondly, the poorer classes are those which more particularly require a fostering hand. They are the infants of society. They cannot help themselves in the first instance. There are even yet some old world spirits (we trust they are but few) who doubt whether it is proper to give them more education than will enable them to read the Scriptures, or even so much. Were it possible to give them such an education as would enable them to read the Bible only, it might perhaps be better for them to stop there ; but seeing that we cannot teach them to walk in the one path without giving them at the same time the ability to stray into another, we are surely bound not to withdraw the guiding hand until we have conducted them so far on their way, that they may not only be able to distinguish the right from the wrong, but may have learnt by experience of mental happiness that there are other pleasures besides those of the senses. Hitherto we have done little more than make experiments in this direction ; but these experiments, even in their failures, have afforded every reasonable hope for ultimate success ; and we would urge again and again the establishment of some comprehensive system, by which not only the means of instruction in the first instance, but of

* Minutes of Evidence, 1849, p. 179.

self-improvement afterwards, may be placed within the reach even of the most destitute.

As we ascend in the social scale, the subject of public libraries assumes a different aspect. Their importance is admitted by all. Whether the object be instruction or mere amusement, the necessity of public depositories of books, to which resort may be freely had, is felt and acknowledged. It is no longer a question whether such institutions are calculated to do good, but how they can be most effectually promoted and maintained. The principle being so fully admitted, we cannot but observe with regret the great mass of evidence which has been collected by the Committee about foreign libraries, bearing but in the slightest-possible degree upon the question. Were this the only objection—if it merely had nothing to do with the inquiry—we might content ourselves with recording our regret, and pass on. But the evil does not stop here—it is calculated to mislead—its tendency is to give false impressions, and to divert the attention from the real object of the inquiry, and from the best means of promoting that object.

The libraries in Great Britain, more or less accessible to the public, are very few. The number is totally inadequate to the wants of the people. This fact was admitted at the time the Committee was granted. It was notorious, and required no evidence to prove it. It was equally well known that, from various causes, the libraries of a similar character on the Continent were more numerous than those of the United Kingdom. No evidence was required to prove *this* fact. Still less was it necessary, for the purposes of the inquiry before the Committee, that an attempt should be made to draw up a statement of the number of books as compared with the number of inhabitants on the Continent and in Great Britain, the sole object of which appears to have been to place England in as unfavourable a light as possible. That there may be no doubt on this point a map is added, in which the several countries of Europe are shaded deeper and deeper still, not in proportion to their lack of civilisation, but of books,—the United Kingdom being, of course, distinguished by the blackest shade of all.

Such comparative views are curious, and, we doubt not, are very interesting to librarians, but how they are to enable the Legislature to promote the establishment of public libraries, we are quite unable to discover. A slight examination of the evidence may throw some light upon the manner in which all this extraneous matter crept in.

At the twenty-eighth page of the Minutes appended to the Second Report, issued in 1850, we find the following questions and answers, Mr. Edwards being the witness:—

“*Mr. M. Milnes.* Have you any objection to state what has been your principal object in taking so much pains in the investigation of libraries in England and on the Continent?—I have for many years contemplated a work upon the economy of public libraries. I began to collect the statistics of libraries as far back as 1835, and I have since, at intervals, continued my inquiries, by getting the best information which I could from official documents and other sources. *Chairman.* Perhaps you are aware that ten years ago I called the attention of Parliament to this subject?—Yes. And that Mr. Panizzi gave some very valuable information upon it?—Yes. And, the year before last, I gave notice of a motion upon the subject; and then, by chance, seeing an advertisement of a pamphlet written by you upon it, not having the pleasure of knowing you, I wrote to you, and asked you if you could supply me with information, which you very readily did. *Is not that the origin in fact of a great part of the inquiry and the evidence laid before the Committee?*—With one exception, that it was not an advertisement which you saw, but you had done me the honor to read a paper which had been published in 1848 in the Transactions of the Statistical Society.”

It would appear, then, that Mr. Edwards had collected together a mass of names and figures about libraries at home and abroad, and called them statistics; and as the Committee wished to know how the establishment of public libraries could be best promoted in Great Britain, he tendered his “statistics” as an answer to the question. The chairman evidently saw, at the very outset, that comparative views were not altogether what they were to inquire about, for the seventh question is the following:—“In what respects do you think a statistical comparison of this kind is of value?” To which the reply is—“Of course, in order to an accurate comparison of the value of different libraries, you ought to know something of the character of the books contained in them respectively; but I think that even a mere comparison of the numbers has some relative value, especially if taken in connexion with the growth, so that you can compare what a library was in point of extent at one period with what it has become at a later period.” What, we must ask, has this to do with the question before the Committee? If we understand the reply at all, it means, in the first place, that, in order to institute a useful comparison between libraries, you must know something about their contents, a knowledge which Mr. Edwards confessedly does not possess; and, secondly, that it is important to shew the numerical contents of the same libraries at different periods—a piece of statistics which Mr. Edwards does not pretend even to guess at in more than one case out of five—and, therefore, upon his own terms, his statistical comparison is of no value. Surely this gentleman

must be aware that in France and Germany and Italy there are a vast number of libraries to which no regular additions are made; in which works published within the last fifty or even one hundred years are hardly to be found; libraries which for all popular purposes are mere sapless trunks. What weight do the hundreds of thousands of volumes in these collections add to the scale?

Our objections hitherto have been directed against the admission of such evidence at all, even supposing the statements to be correct. But Mr. Edwards's statements are in very many instances erroneous. This, however, does not appear to be an objection in his eyes, as we learn from the following curious examination, at p. 70 of Minutes of Evidence, 1850.

“*Lord Seymour.* You were aware that your statistics were not accurate? — *Perfectly so, &c.* What value do you attach to inaccurate statistics?—Of course the value attached to statistics must be always comparative. The first effort in compiling a general view of public libraries of this nature must be expected to have many errors; but upon every subsequent revision some of these errors will be removed,” &c.

Again we ask, what has all this to do with the inquiry before the Committee? and so thought Lord Seymour, for his next question is—

“For a Statistical Society it may be desirable to approximate gradually to accuracy in statistics; but is there much value in giving to the House of Commons, in an Appendix, statistics upon which very little reliance can be placed?—[The answer to this question is very much what might be expected.] I must venture to differ from the opinion that very little reliance can be placed upon them. I have carefully verified 655 distinct statements contained in the Appendix, and I find only forty-two of those attended with errors of any description.”

We beg to place this reply among Mr. Edwards's statistics.*

A bad use has been made of these bad tables. Britain is represented as in a state of mental darkness from the want of public libraries, while the Continent is blazing with infinite multitudes of these suns of civilisation. As a natural consequence of this one-sided view, the number of libraries on the Continent has been exaggerated, while many English libraries have been omitted. When all this machinery has been brought into working order, the results are shewn as follows, viz.:—Brunswick

* See four papers signed “*Verificator*” in the *Athenæum* for November 17 and 24, and December 8, 1849, and January 5, 1850, where some of the blunders in these tables are most ably exposed. Similar exposures are also given respecting the German libraries, in the *Serapæum* for January 15, 1850.

has 2353 volumes publicly accessible to every 100 of the inhabitants; Mecklenburg-Strelitz has 1111; Oldenburg 1878; Rudolstadt 1150; Saxe-Weimar 1057; Waldeck-Pyrmont 2000; Russia 80; and, lowest in the list comes Great Britain and Ireland, which have only, says Mr. Edwards, 53 volumes to every 100 of the inhabitants. Any person left to draw his own conclusion from these facts, would naturally infer that they were meant to shew that no nation, Russia not excepted, was so low in the scale of mental improvement and civilisation as the United Kingdom. And this was the view taken by Lord Seymour; for he asks, (*Evidence* 1850, p. 856,)

“In page 275 you give a calculation of the number of volumes to every 100 of the population, from which it appears that at Cracow there are 141 volumes for every 100 of the population, while in Great Britain and Ireland there are only 53 volumes to every 100 of the population; does not that so appear?—I give a table, shewing in alphabetical order all the States of Europe, but without drawing any comparison between Cracow and Great Britain, the circumstances of which are so different, that one would hardly make a statistical comparison in that case—one would compare England and France, but not England and Cracow.”

(Q. 857).—“What is the value of your statistical information if no inference can be drawn from it?—I do not say that no inference can be drawn from it; I only say there is no fair comparison between Cracow and Great Britain.”

If Mr. Edwards did not mean to institute a comparison in this instance, by means of his “Approximate Tabular View,” he certainly did in his map before alluded to. Lord Seymour attempts to draw an inference from *this* source, but with no better success.

(Q. 344).—“According to that map Italy is much more enlightened than England?—I do not at all assume that; on the contrary, I think it would be almost ridiculous to draw a comparison of that kind; the map is only given to illustrate what I believe to be in the main substantially the fact, as to the relative condition of these countries in respect of the number of books stored in them in libraries for public use. I believe that it does actually in the main represent their relative position in that one particular; but of course it has no reference whatever to culture, or to the state of education, or to the state of literature—it only represents one single fact; that fact I think important enough to be taken into account in estimating the intellectual condition of a country, but by no means to stand by itself.”

After this opinion, it is hardly necessary to pursue the subject further, as far as this witness is concerned. He declares, *totidem verbis*, that his statement of the relative number and extent of public libraries has no reference whatever to the state of cultiva-

tion, of education, or of literature. What, then, has it reference to? Mr. Edwards informs us—to the intellectual condition of a country, which, consequently, is, in his opinion, something distinct from its cultivation, education, or literature.

Under other circumstances, we should have despatched Mr. Edwards's statements in very few words. But they occupy too prominent a place in, and have, we fear, exercised too unfortunate an influence upon the progress of the labours of the Committee, to be passed by without an effort to place them in their true light. Mr. Edwards gives evidence *de omnibus rebus*—of libraries in England, libraries in Scotland, libraries in Ireland, libraries in France, Italy, Germany, Norway, Sweden, Denmark, Russia, Poland, Hungary, &c. &c. &c. When asked, in 1849, Q. 9, "Have you visited many libraries in this country?" he replies, "I have visited several in this country, and some in France; but I have not seen any libraries out of this country and France." In 1850, we learn the extent of Mr. Edwards's acquaintance with foreign libraries.—Q. 143. *Lord Seymour*. "With regard to the foreign libraries, what foreign libraries have you visited?—I have visited the Royal Library at Paris, now the National Library, [12 or 13 years ago,] and the library at Rouen, and some other small libraries.—Q. 145. *Mr. C. Lewis*. What other libraries in France have you visited?—I think a small library at Havre." So far as personal experience went, therefore, Mr. Edwards was very ill supplied.

We are willing to give this gentleman all possible credit for good intentions. It was not his fault that his information was not equal to his good-will. But it was his fault that he persisted in giving evidence upon subjects with which he was only imperfectly acquainted. Had he confined himself to directing the attention of the Committee to the various channels whence they might derive information, he would have done good service. As it is, he has given us tables in which towns belonging to one country are placed under another; in which libraries are inserted which ought to have been omitted, while others are omitted which ought to have been inserted; in which numbers appear bearing no relation to the truth; in which authorities contradict the statements they are brought forward to support: we find one set of tables contradicting another set of tables; we find one table professing to give certain information, and yet excluding it when it tells against the compiler's theory;—we find, in short, many things we ought not to find, and look in vain for much that ought to be there. After a very careful perusal of his evidence, we have come to the conclusion that his statistics, apart from the question of their applicability to the subject under inquiry, are too faulty to be of any value; and

as to the rest of his evidence, that there are few points he has touched upon, upon which better evidence has not been given by other witnesses.

It must not be supposed, however, that our strictures extend to all the evidence contained in these Reports. There is a vast deal that is not only highly interesting, but extremely valuable. With one remarkable exception, which we shall mention immediately, the Committee have evidently sought with much care for the best sources of information, and the pages of their Evidence contain details respecting the poorer classes,—the efforts to establish mechanics' institutions in different parts of the country,—the struggle to maintain local libraries,—which cannot but prove highly important to those who may be engaged in carrying out any scheme of a general character for supplying the means of gratuitous reading to the public of Great Britain.

But there is still a want of practical detail throughout. It is not enough to say, let us first get the libraries, and we will then learn to manage them. If the Committee merely proposed to establish the fact that there was a great want of public libraries in England, they undertook a work of supererogation. The want was well known when they commenced their labours. If they wished merely to ascertain how public libraries could be fostered, they have burthened their evidence with a vast mass of unnecessary detail; but if they wished to place on record all facts bearing upon the subject of the establishment and maintenance of public libraries in Great Britain, then it is clear that they have omitted much that was important, and easily to be procured. We allude especially to the evidence which could have been given by the principal librarian of the British Museum, and the keeper of the department of printed books in that institution. The Committee examined the librarians of Williams's Library; Sion College Library; Cheetham Library at Manchester; Tennyson's Library; Marsh's Library in Dublin; the former librarian of Caius College, Cambridge; and the librarian of the Royal Society. They also obtained information, from competent witnesses, respecting the University Library of Aberdeen; the Advocates' Library at Edinburgh; the various libraries in America; the library of the Royal Dublin Society, &c. &c. But the names of Sir Henry Ellis and Mr. Panizzi appear nowhere in the Report published in 1849.

As a sequel to these Statistics of Public Libraries, we shall now offer some account of the details of the management of the British Museum Library. The business of that great national library may be classed under three heads—Acquisitions, Catalogues, and Arrangement.

And first of Acquisitions.

It is known to many of our readers that books enter the Museum Library by three channels, viz., by copyright, by purchase, and by presentation. By the recent Copyright Act an advantage is conferred upon the British Museum which is not enjoyed by the other four libraries of public deposit; that is to say, the Museum is not obliged to demand works, but the London publishers are bound to deliver their books within one month of publication, and those residing in the country within three. For the reception of works so delivered, an office is fitted up where a person is in constant attendance to give the necessary receipts. These receipts are drawn up on a printed form, the particulars peculiar to each work—such as the title, number of the volume, size, date, place of printing, and publication, &c.,—being filled up in duplicate by Wedgwood's 'manifold writer.' Of this receipt the duplicate is kept by the Museum, and thus forms not only a check upon the publisher, but also upon the receiver, and a register of the receipts under the Copyright Act.

In the library everything is systematized as much as possible; the consequence is that little time is lost in giving directions. Every one knows his duty, and knows at the same time that he must perform it. There are two peculiarities in Mr. Panizzi's arrangements; one is that each part is made to depend more or less upon the rest, so that derangement in one quarter is sure to be felt in another—and thus neglect is at once detected. The other is, that, wherever it is possible, one process is made to answer two or three purposes. The mode of giving receipts is one instance of the latter peculiarity, and we shall have occasion to point out others as we proceed.

Purchases are effected either by direct orders, or in the way of selection from books sent in for approval. This duty rests solely with the keeper of the department, who alone is authorized to decide in the first instance what works shall be added to the collection. The trustees, however, possess a veto upon the purchase of even the smallest work. All parcels of books are accompanied by an invoice. The contents of each parcel are checked by the invoice, and then examined by the keeper, who makes his selection—rejecting all such as he thinks it inexpedient to purchase, either on the ground of price or condition. The invoice is then corrected, by striking out from it all such as have been so rejected; and the books retained are handed over to an attendant in order that the catalogues may be searched for the purpose of ascertaining that the books proposed to be retained are not already in the library. When this process has been carefully gone through, and the invoice again weeded, by striking out all such as are found to be already in the collection, a bill is

made out by the bookseller from the invoice as finally corrected, and the books retained are again compared with the bill, which is submitted to the keeper a few days before a meeting of the trustees. At the foot of the bill, the keeper writes an order for payment, and the bill so subscribed is laid before the trustees, and, if approved by them, they make their order authorizing payment.

In the case of books which from their extreme rarity, from being printed on vellum, or from any other cause, do not come within the class of ordinary accessions to a library, a special report from the keeper of the department is required by the trustees, stating the grounds upon which it is considered advisable that the article in question should be added to the collection. These reports are not mere matters of form. A collection of such documents would prove a most curious and valuable addition to bibliographical literature. The trustees, although actuated by a liberal spirit in this respect, occasionally exercise their power of rejection. But it must be presumed that the recommendation of their officers always has great weight, the trustees being well aware that the desirableness or non-desirableness of an object must be judged of in connexion with the particular collection to which it is proposed that it should be added, and not upon its own individual merits. For this reason it is that no work can be considered too costly for the British Museum Library, provided the price be not excessive. The art of printing has its history like every other art, and its history requires illustration like the history of every other art. The history of printing is the history of civil and religious freedom. When Providence determined that mental darkness should be removed, man was made the worker out of his own emancipation, by the inspiration of the discovery of printing. This was a second creation of light. If we give to the history of printing the importance it really possesses, and regard great libraries like that of the British Museum as the depositories of the evidences of its miraculous progress and effects—then a fragment of a Donatus, a Caxton, an early edition of a Bible, a first edition of a classic, or the first productions of the printing press in the United States, Mexico, California, Australia, or the Sandwich Islands, cease to be curiosities, and take their deservedly prominent place in the history of civilisation.

In selecting the accessions to be made to the library of the British Museum, this illustration of the past has been kept constantly in view, at the same time that every effort has been made to give the current literature of all countries a place on the shelves of the institution. It must not be assumed that every, or indeed any class is perfect. For such a consummation two conditions are indispensable—unlimited funds, and unlimited

space. An approximation might be made to the first requisite, for, to the honour of Parliament in general, and of Mr. Hume in particular, be it spoken, every disposition has been shewn to make grants in the most liberal spirit. But space is another question. Walls of five feet in thickness are not of rapid growth; and if they were, Bedford Square, and Upper Montagu Place exercise a rather powerful veto upon any very extensive ramification. We have, however, great reliance upon the resources and energy of the present keeper of the printed books, upon the readiness of the principal librarian to support, and of the trustees to adopt any suggestion for the improvement of the noble institution the affairs of which they administer; and we do not despair to see the library represent in a complete form, not only the scientific and polite literature of the United Kingdom, but of the whole world.

Presented works are laid before the trustees at the monthly meetings, and thanks ordered in the usual manner in such cases.

The next process is to attach to each part or volume a mark, by which it shall be distinguished as the property of the Museum. This is now effected by impressing at the beginning of the book the Museum stamp, and at the end the date of the day, month, and year, when the bill was signed for payment by the keeper of the library. We have before observed, that whenever it is practicable, one process is always made to subserve more purposes than one—and this stamping of the books is another instance of it. It is a proof in the first place, that the book has been paid for, and is thus in every sense the property of the Trustees; and, secondly, the bills being kept in chronological order, reference can be immediately made to them from any book of which it may be desired to ascertain the price, or of whom purchased.

Books obtained by copyright, are stamped in like manner by the person who receives them.

Ink of three different colours is used in stamping books, for the three different modes of acquisition—red, indicating that a book was purchased; blue, that it came by copyright; and yellow, that it was presented.

Having thus shewn how books are acquired and stamped, we shall now proceed to the important detail of *cataloguing*. And here we must beg our readers not to be alarmed by this awful word “cataloguing”—a word suggestive of laborious research and mechanical care and precision to an extent suspected by few. It is far from our intention to enter into the subject of classed and alphabetical catalogues, or to attempt to decide the question between long and short titles. These are matters which have already been productive of too many scratches and hard knocks to hasty volunteers in this dangerous field.

For the purpose of forming the catalogue, several gentlemen possessing peculiar qualifications are employed in the library. All are linguists to a considerable extent, some possess this accomplishment in a more than ordinary degree. In a library like that of the British Museum, where the literature of every country in the world, and of every age is represented, it is of course the duty of the authorities to see that there shall be found in it persons capable of describing works of such varied character. This duty has not been neglected. One cataloguer attends solely to the Chinese books—another when requisite to Oriental works—a third to Hebrew and rabbinical literature—a fourth devotes his attention to the maps—a fifth, in addition to other duties, catalogues the music and Slavonic works—while books in Latin, Greek, French, Italian, Spanish, Portuguese, German, Dutch, Danish, and Swedish, find ready hands for registering their contents.

Great efforts are made to secure uniformity of plan in cataloguing, so far as that most desirable object is attainable. For this purpose a code of rules has been drawn up, and revised and sanctioned by the Trustees. Objections have been brought against these rules on the ground of their number and minuteness; but as no objector has yet shewn how six persons can be brought to catalogue in one and the same manner books which may be catalogued six different ways, unless they are told which of the six ways they are to follow, we think we are at liberty to adopt the views so fully explained by Mr. Panizzi in his evidence before the Commissioners on the British Museum, wherein he brings his own matured experience to bear with overwhelming force upon the fancies of his opponents.

When a book is catalogued it is passed over to a reviser, whose duty it is to see that all the rules laid down for cataloguing have been duly observed. This is a work of no slight labour and responsibility, and is intrusted to those only who have had great experience, and have shewn much care and skill as cataloguers. This may be regarded as an excess of caution, but it has been found advisable in practice. It is evident that there will occur differences of opinion in the interpretation of rules, however clearly and strictly worded—and that when several persons work independently of each other, although under the same rules, discrepancies will be found which must be reconciled. This is one of the chief duties of the revisers. The keeper of the department is the ultimate referee in all cases of difficulty. These discrepancies occur most frequently in the titles of anonymous works; and we must here give in our adhesion to the opinion expressed by more than one witness before the Commissioners, viz., that there should be one simple and uniform rule for cata-

logging anonymous books; the first word or the first substantive of the title is better than any other, because it is more simple than any other; but let there be one rule—let that rule be one that can be uniformly adopted, and let there be plenty of cross-references from what are termed leading words of the title; as cross-references these leading words enable us to find the book—but they only lead us astray in proportion to their number, when one is selected for the main entry of the work.

The books being catalogued and revised, the next care is to *arrange* them on the shelves. This is a very important process, and one the execution of which requires a vast amount of general information, and a knowledge of not less than twelve languages. In the library of the Museum the objection to classification extends no farther than to the catalogue. The books are arranged in six great classes, viz., 1. Religion. 2. Jurisprudence. 3. Philosophy. 4. Arts and Trades. 5. History. 6. Literature. The subdivisions under each of these classes are strictly and even minutely observed. We regret that our limited space forbids our entering more into detail upon this branch of our subject, as it is one of great interest and utility, and is that part of the arrangement of the library which is far from being the least creditable to the gentleman engaged in carrying it out.

The library is divided into presses, each of which has a number; the shelves of each press are distinguished by a letter of the alphabet, and the place of each book on a shelf is indicated by a number, thus—573, c. 13, means the thirteenth book on the third or c. shelf of press 573. When the present library was erected, the numbers of the presses were carried on from those of the King's library, and when a supplementary room to the new library was built, the numbers were again carried on, thus forming a regular series from one to 1618. A natural consequence of this arrangement has been that the same class of books will be found in more places than one, it being evident that when all the spare room left between one class and another has been filled up, a fresh locality must be assigned to subsequent acquisitions in the same class. In order to avoid this inconvenience as far as possible, a new plan has been introduced into a supplementary library recently erected. The numbers of the presses are no longer in immediate sequence, thus—supposing the first press to be numbered 2000, and that the works under the class religion occupy two presses, twenty numbers may nevertheless be allotted to this class. The first three numbers would then be 2000, 2001, 2020. When a third press was required for theological works, instead of placing them in another part of the library, the books in the press called 2020, together with its number, would be moved on to the next press, and the press oc-

cupied by 2020 would be called 2002. By this process all the works belonging to one class may be kept together for a longer period than was practicable under the old system. This arrangement involves two indispensable conditions, viz., plenty of room, and that all the presses should be exactly of the same size. This is called the expansive system.

An expansive system, but of a different character, has also been applied to the periodical publications, and to the maps. This plan consists in attaching a number to the book or map, but not to the locality in which it is placed; the numbers in these instances, also, not being in immediate sequence. Thus the periodicals may be marked 1, 5, 10, 15, 20, &c., leaving the intervals to be filled up by future acquisitions; the advantage of which is, that those of a particular character and country can be kept together without interfering with the sequence of numbers.

The maps, requiring more minute classification also, demand a more complicated system of marking. The following is the mode adopted:—The collection is arranged geographically. All the folded maps, comprising almost the entire collection, are kept in light millboard cases, somewhat resembling solander cases. Maps of the world, of the great divisions of the globe, and of particular countries or localities, form what are termed classes, and no two classes are allowed to be placed in the same case. These classes are numbered, but not in regular sequence, intervals being left for additional classes. Maps of the same class are arranged in the cases chronologically, and numbered, but not in regular sequence, intervals being left greater or smaller according to the date to be provided for; thus, fewer numbers are left open between 1500 and 1600 than between 1600 and 1700, it being very properly considered that the accessions of maps printed in the seventeenth century will be much larger than of those printed in the sixteenth.

The books, when catalogued and revised, are sorted into their several classes and subdivisions; these parcels so sorted are carried to their respective localities, and arranged on their proper shelves, the titles remaining in the books. When the books are placed, an attendant marks the books and their respective titles with the press-mark proper to each, throwing each title as he marks it into a box.

When the book is marked, the next process is to attach the press-mark to the back of it. These press-marks are printed on paper of various tints to match the different coloured leathers used in binding. They are printed in large sheets and cut out with a stamp of an oval shape. The number of the press is attached to the upper part of the back of the book, the mark for the shelf, and number of the shelf, to the lower part of the back.

This plan saves a great deal of time. Before its introduction, the place of a book could not be ascertained without opening it—now it is only necessary to look at the back, and its proper locality is seen at once. Another advantage is, that if a book be placed by accident in a wrong press or on a wrong shelf, the mistake is sure to be detected.

The titles, when marked as above described, are sent to the superintendent of the transcribers, whose duty it is to see that all the titles are duly entered in the catalogues, and to revise the entries so made, in order that there may be no blunders in the transcript. These duties of transcription and revision demand a considerable acquaintance with languages in the transcribers, and, more especially, in the reviser. It is evident that the latter must be familiar with all the languages known by the whole body of transcribers. The process of inserting titles in the catalogue is so peculiar, that we feel ourselves justified in going somewhat into detail in describing it. Each mass of titles is, in the first place, separated into English and Foreign. Each of these sets is then arranged in alphabetical order, and incorporated with those which may have already been accumulated for transcription. When the titles are to be copied, they are distributed among the transcribers according to the languages each may best understand. This transcription is not made into the catalogue, but into a book, the leaves of which consist of the thinnest paper, prepared for Wedgwood's process of manifold writing. Four transcripts are taken at once, carbonic paper being placed between the first and second sheet, and the third and fourth. Each transcriber uses two books, by which arrangement the superintendent is enabled to collate with the original title-slip the work of each day, without stopping the transcribers, who continue the transcription in the book not under revision. These books, as they are filled and revised, are handed over to the binder, who mounts each leaf upon one of rather stronger paper.* These leaves when dried are subjected to enormous pressure. Each four duplicate sheets are then pinned upon a board and cut into slips between each title. We now have the transcription on separate slips, the four duplicates being kept together. The next process is to arrange them in their proper order, and incorporate them with the mass of titles (if any) already prepared and arranged for insertion in the catalogue.

* We understand that experiments are now being made for the purpose of procuring a paper which, possessing the qualities necessary for being written upon by Wedgwood's process, shall, at the same time, be so stout as to render the process of mounting unnecessary. Should these experiments prove successful, they will lead to a considerable saving both in time and expense.

When the insertion is to be made, the transcribed titles are divided into parcels according to the letters contained in each volume of the catalogue, and then each title is marked with a number, and a corresponding number marked in the place in the catalogue the title is to occupy. Each volume of the catalogue so supplied with titles is then handed over to two binders, one of whom pastes the upper and lower edge of each title and hands it to his companion, who inserts it into the catalogue—the two ends of each title being left open. When it becomes necessary to shift one of these titles in order to preserve the strict alphabetical arrangement, a paper-knife is inserted into the open end, and the title is removed without difficulty. The slip upon which the transcription is made being mounted upon another, any abrasion which may occur from this process affects not the slip written upon, but only that upon which it is mounted.

Should a thicker paper be introduced, and the process of mounting be discontinued, this advantage will of course be lost. Before we quit the subject of transcribing, we will mention a striking fact connected with the expense of this branch of the management. It appears from the evidence of Mr. Panizzi before the Museum Commissioners, that at one time the transcribers were paid at the rate of one penny per title. Under the present system, this same item amounts to about three-fourths of one farthing per title, or three-sixteenths of the former charge—in other words, the same amount of work which formerly cost four pounds, is now obtained for about fifteen shillings.

When the title of a work is entered in the catalogue, the work may be said to be then at the command of the readers; we believe, however, that we are justified in stating, that at no time has a reader been denied the use of a book, merely because the title had not appeared in the catalogue.

The service of the reading-room, like every other service in the department, is systematized. We have already given the history of a book from the shelves of the bookseller to those of the Museum; we will now give the history of a book from the shelves of the Museum to the hands of a reader, and back to its shelf again.

The readers are provided with blank tickets on which they write the press-mark, title, very shortly, size, place, and date of the book they want, the date of the application and signature of the reader being subscribed. These tickets are handed to an attendant who sits at a bar which separates the reading-rooms from the library. The tickets are passed by him into the library, where they are placed on a table in the order in which they are delivered from the reading-rooms. The attendants, whose duty it

is to supply the readers with books, take these tickets in the order in which they are received, no one being at liberty to select a ticket, unless it be for a book which stands near to one he is about to fetch. To each of these attendants a number is attached, regulated originally by the order of the initial letter of his name in the alphabet, and each attendant is also furnished with, say, 200 pieces of mill-board, the ends being covered with red roan leather, on the edge of which the number of the attendant is stamped, and on the side the number of the board, these boards being numbered in regular sequence, from one up to as many as the attendant has. When a book is taken from the shelf, the attendant puts one of his boards in its place, taking care to use them in their regular order, that is, having once used, say, No. 10, he will keep that back until he has gone through all his boards and come round to 10 again. Each attendant is also provided with a book filled with blank leaves. When he has taken from the shelf a book for a reader, he marks in pencil on the back of the reader's ticket the number of the board he has left in its place. He then enters in his book, in one line, first the press-mark of the book, the name of the reader, and his own number, and the number of his board; and then in the same line the press-mark again—the name of the author or first word of the title of the book—the size, place, and date—the name of the reader, and the number of his board.

When the work has been entered by the attendant, it is placed on the bar which separates the library from the reading-room, whence it is taken by one of the attendants in the reading-rooms and delivered to the reader. The attendant who so delivers it then writes on the ticket the letter D. (meaning delivered,) and hands it to the attendant we have before mentioned as stationed at the bar, who deposits it in one of a set of pigeon-holes fixed beneath the bar under the initial letter of the reader's name. The reader is responsible for the book specified on his ticket so long as the ticket remains in the possession of the authorities of the library. When a reader has no longer occasion for a work, he returns it to the attendant at the bar, who delivers to him his ticket in exchange, having first compared the work with the ticket, in order to see that all is returned that is specified upon it.

The books so returned are placed on a table and sorted according to their press-marks, for the purpose of being restored to their respective places on the following morning.

It frequently occurs that a reader is desirous of using the same book from day to day. When this is the case he writes his name on a slip of paper and places it with the books, which are then deposited in closets fitted up with sliding shelves for this especial purpose. The utility of this plan may be appreciated from the fact, that every year nearly 100,000 volumes are in this manner

laid aside for continuous use by the readers. The consequent saving of time and labour is immense. It must not be imagined, however, that through this process a reader can insure to himself a monopoly of any work. The maxim "first come first served" is strictly adhered to. Should a reader apply for a work so set aside before the person for whose use it is kept presents himself to claim it, it is *transferred*, as it is termed, to the new reader. This process consists in entering the work in the usual form, but in a particular book and in red ink. These entries are made by an attendant, whose duty it is to take charge of the closets, and also to see that the readers' tickets are actively and properly attended to.

Every attendant writes in his book the day of the month at the commencement of the entries of each day. At the end of the day he cuts between each line of entries as far as his own number. The books of all the attendants are then taken away by the bookbinder, whose duty it is to cut off all the entries as far as they have been cut through by the respective attendants, to arrange them all into one series, according to their press-marks, and paste them into a book, heading each day's work with the date, and writing at the end the number of these dockets. This forms a daily register of all the readers who have written for books.

Every morning the books returned from the reading-rooms on the previous day are carried to the several parts of the library to which they respectively belong. Two attendants then go round with the register of short entries or dockets above referred to, and while one puts each work on the shelf, and calls out the press-mark, the other calls out the number of the attendant he finds in the register, whose board is then removed, and the docket is stamped in red ink, with the date when the book is returned, thus—18. 3. 51., indicating that the work was restored to its place on the 18th of March 1851.

All this will doubtless appear complicated and confused to our readers; and it may by some be considered that refinement and minuteness of detail have been carried too far. In the actual working of the scheme, however, there is neither complication nor confusion. Every effort is made to economize time and labour, but without sacrificing that care or giving up those checks which are absolutely indispensable in the management of a large public library. A comparison of the annual returns of former years, with those of more recent date, will shew with what vast rapidity the labours of the department have been extended, and to how great a degree of perfection the system of statistical detail has been carried.

The contents of every bill is analyzed; that is to say, the

number of volumes, of parts of volumes, of maps, and of sheets of maps, are taken out and entered in a book in their respective columns. The same is done with objects presented. At the end of the year these columns are cast up, and it is immediately known what has been the number of articles procured during the year through these channels respectively.

The duplicate receipts kept by the receiver of works under the Copyright Act give the same information for this branch of the acquisitions.

The register shews the number of books returned to the shelves every day. A book kept by the attendant who has charge of the closets affords similar details respecting the number of books kept for the readers from day to day.

Every cataloguer registers daily, in a book kept by himself, the number of titles written by him; the aggregate of these books gives the number of titles written in the department during any period.

Revisers and transcribers keep similar accounts.

One of the superintendents of the reading-rooms registers the number of visits made daily to the reading-rooms, and reports the total, at the end of the year, to the keeper of the department of printed works. A similar account is kept in the readers' lobby; but as this latter account makes no distinction between those who come to read and those who may pass into the reading-rooms for other purposes, discrepancies may occur, and in the returns for the year 1850 actually did occur, between the two accounts.

The result of all this is, that in the course of a few hours an exact and minute return can be given of everything done in the department during the year, or any other given period, the whole forming an array of numbers truly startling.

We have before observed that one process, whenever it is possible, is made to subserve several objects. We have shewn how the receipts for books delivered under the Copyright Act answers not only the ordinary purpose of a receipt, but also of a register of such books.

The readers' register shews at one glance how many books were sent to the reading-rooms on a particular day—the day any book was removed from the shelves—for whom it was taken—by whom it was taken—the particular board left for it—and when it was returned. Each attendant's register shews what books he removed from the shelves on a particular day—for whom, and the number of his board; while the boards on the shelves shew what attendant removed the book, and by its number points to the particular entry in his register. By means of this system a book can be traced regularly through any number of hands for

any length of time, and faults in the reading-room service can in like manner always be traced to the guilty party.

The binding of books forms a very important item in the economy of a public library. The great desideratum for the mass of books is strength and durability at the least possible expense. In a library like that of the British Museum, it may well be imagined, there is abundant opportunity for testing the various styles of binding and kinds of leather, so as to arrive at the most correct judgment upon this point. The general plan now adopted is as follows:—All dictionaries to be full-bound in russia. Other works likely to be in frequent use to be half-bound in morocco, with cloth sides. Two or more volumes of the same work are always bound together where their bulk will permit it. Pamphlets are half-bound in roan, with paper sides. Experience has shewn that this plan is in every respect the most economical that could be adopted. Different colours are used according to the subject of the book, thus, *red* for history, *green* for botany, *blue* for theology, &c.

In the library of the British Museum, as in other large libraries, certain works considered to be select are set apart from the rest and preserved with greater care. Among these are several remarkable for their bindings, which are arranged so as to illustrate as far as practicable the styles of different schools, English, French, Italian, &c. The present keeper of the department, looking upon bookbinding as something more than the art of stitching loose sheets neatly into a cover, has endeavoured, in binding rare and valuable books, to follow the grand example set by Grolier, Majoli, De Thou, and others, and would fain give an individuality to the dress of his protégés. In some instances the success has been great. A good bookbinder ought to be a man of great taste, and an artist. All use flowers and studs and fillets; but what flowers were ever so graceful as the flowers of Roger Payne? who has ever sprinkled his studs as he sprinkled them? who cannot immediately recognise Lewis's simple fillet, so beautifully true? The German style of tooling at the end of the 15th century was heavy, but it was blind, and the effect, consequently, was massive and grand. German tooling at the present day is no less heavy, but it is no longer blind, but in gold; the effect is no longer massive and grand but vulgar. The materials are there, but the artistic taste is wanting.

But we are diverging into a dissertation upon bookbinding. By the Statutes of the British Museum, no object is allowed to be removed from the premises. This regulation involves the necessity of having a bookbinder attached to the establishment. When books are removed from the shelves for the purpose of being bound or repaired, a board similar to those above described

as used by the attendants is left in its place. On this board the letter B. is stamped, indicating that the book is in the hands of the binder. The books so sent are entered by an assistant in what is termed the binder's book, a margin being left on both sides. In that on the left the binder writes the press-mark of the book, in that on the right Mr. Panizzi writes directions as to the manner in which the book is to be bound or repaired. The entry of each batch of books is dated and signed by the binder, and when returned each entry is stamped with the date. The signature makes the binder responsible for the books, the stamp is his discharge. The date at the head and the stamp on the entry shew how long he has kept each book. The entries also are made in the form to be observed for the lettering piece on the back of the book, and this is again an instance of one process serving a double purpose.

We will only mention one point more: all the shelves upon which large and heavy or handsomely bound books are placed are lined with hard and smooth leather. This simple process tends greatly to preserve the binding.

These are some of the details of the management of the British Museum Library, which, although we do not pretend to say that they are, as a whole, applicable to all libraries, may suggest to every intelligent librarian arrangements, even for libraries of the most limited extent, which are invaluable, and which it might have been well that one so experienced as Mr. Panizzi, had obtained an opportunity of explaining to the Committee.

The length to which this Article has already extended compels us to bring our remarks to a close. The public libraries on the Continent would present many interesting materials for comment; but however well adapted they may be to the wants of the districts in which they respectively exist, it is doubtful if they would afford many points fit for imitation in this country. Mr. Panizzi states in his evidence given before the Committee, that he had visited about ninety foreign libraries, and that he had not learnt a single fact that he could apply to the library of the British Museum under its present constitution. It is this consideration which has led us, in the preceding Article, to present so fully to our readers that which we believe likely to prove of most practical utility,—the broad and comprehensive scheme, and admirable details of the management of our own great National Library.

ART. VIII.—*Biographie de LAZARE NICOLAS MARGUERITE CARNOT, Membre de la première classe de l'Institut de France (section Mécanique.)* Par M. ARAGO, Secrétaire Perpétuel de l'Académie des Sciences. Paris, 1850.*

It is only in seasons of danger, and during the emergencies of a Revolution, that the genius of an empire is roused from hybernation, and summoned into life and activity. When France lay prostrate under the despotism of her kings, her military and her intellectual glory were equally eclipsed. The privileges of class overbore the claims of merit, and the very power of competing for the prizes of the State was denied to those who would have carried them off in triumph. Among a people thus morally degraded, the seeds of discontent ripened where the seeds of glory had been crushed; and that which would have been the ornament and safeguard of the throne was stimulated to dishonour and to destroy it. The moral of the French Revolution, pregnant with individual and national instruction, has been appreciated neither by the people whom it scourged, nor the nations whom it scared. The terrors of anarchy and democratic violence, indeed, are destined to have a broader field and a longer reign before the rulers of nations are taught to govern;—and education and knowledge must have a wider range, and take a deeper hold, before the people learn to obey.

There is no phase in which man can be contemplated more painful and humiliating than that in which he appears as the pilot of the State; and in the history of European governments, whether absolute or constitutional, we have too frequently to deplore the consequences of presumptuous statesmanship, and of imbecile or reckless legislation. When incapacity and ignorance are placed at the helm, and talent and wisdom in the hold, the vessel of the State may survive the summer lightning and the zephyr gale, but it will in vain seek its haven when Jove brandishes his thunderbolt, and Neptune upheaves his trident. The revolutionary history of France displays to us the magnitude and grandeur of achievements when genius and talent are the only passports to power, and proclaims to us how nobly the intellectual and military glory of a people may be sustained even when civil war rages in the midst of them, and external foes threaten them from without. In the chronicles of our own country, whether of peace or of war, we may study the baneful

* Extrait du Tome xxii. des Mémoires de l'Académie des Sciences.

effects of an opposite system. In what age have we found a Colbert, whose appreciation of knowledge inspired him with the patronage of literature and science—whose taste fostered the arts of polished and industrious life—whose liberality endowed the educational institutions of his country, and whose piety and wisdom prompted him to suppress immorality and vice by teaching and reforming the immoral and the vicious? The records of the past have not preserved to us even the shadow of so glorious a name. The experience of passing years exhibits to us no such minister, and in the horizon of the future there looms no auroral gleam of a luminary on its way. We have, on the contrary, to mourn over establishments destroyed—churches breaking down—colleges in decay—teachers starving—and wise men consigned to poverty and degradation.

Nor are these evils counterbalanced by financial wisdom,—by commercial, manufacturing, and agricultural prosperity, or even by the vain splendour of military and naval glory. Science was not more assailed in a darker age by the persecution of Galileo, the exile of Tycho, and the poverty of Kepler, than it is at this hour, and in this land, by the miserable expediency of heaping imposts upon knowledge, and the heartless taxation of invention and discovery; and the heart of the philanthropist could not have been more lacerated by the sight of negro humanity in chains, than it might now be by the imposition of taxes on the health, the prudence, and the parental forethought of British subjects.

We wait for the advent of a minister strong in piety, knowledge, and moral energy, who shall raise to the same platform all the various interests of the State, and who shall give its honours to those who merit them, its offices to those who can best discharge their duties, and its patronage and support to everything that can advance the intellectual glory and the material interests of the nation. Such a pilot must be willing to quit the helm when his people cease to obey him, and must seek for permanent fame from the measures which he has lost, as well as from the trophies which he has won. The man who can thus act must be moulded from a nobler material than vulgar clay—not from the fragile pottery which a breath can break, and a vibration shiver; but from the tough and shining porcelain which rings when it is struck, and rebounds when it falls.

We have been led into these reflections by the perusal of the admirable Biographical Memoir of Carnot, which we owe to the eloquent pen of M. Arago. The history of a great man by a man equally great—of a patriot of the first French Revolution by a patriot of the last, cannot fail to rivet the attention of thoughtful men, even if it did not, as it does, throw the brilliant

light of truth over characters which faction has defamed, and upon deeds of glory which proscription and exile have obscured. Rich in its anecdote—brilliant in its wit—powerful in its argument—vigorous in its eloquence, and generous and lofty in its aspirations, this biographical memoir will challenge a comparison with the most elaborate productions of ancient or of modern times. It is in studying the life of such a man as Carnot, by such a writer as Arago, that we may discover those germs of discontent which so dangerously ripen into revolution; and that we are enabled to appreciate those hidden and irresistible influences which urge the civilian from his hearth, and the soldier from his barracks, to sustain the liberties of their country, and to take their place in its Forum or upon its ramparts. In the feelings of one such heart we recognise the impulse upon that of thousands, and by integrating their individual throbs we may estimate the frenzy of their combined pulsation.

Such of our readers as may seek in the perusal of the original memoir a fuller account of the Life of Carnot than our limited space allows us to give, will, doubtless, be impressed as we have been with the value of a National Institution, which embalms in eloquence the memory of its members, and transmits to posterity the record of their virtues and achievements. In our own land no such obligation is felt, and no such duty discharged. The philosopher passes from the circle which he has adorned, honoured doubtless by the tears of his associates, but no eulogy is pronounced over his grave, and no monument rises to the ornament of his country, and the benefactor of his race.

Lazare Nicolas Marguerite Carnot, whose life and character we are about to review, was born on the 13th May 1753, at Nolay, in the department of the Côte-d'Or in Burgundy, a duchy which had been the cradle of three of the greatest celebrities of which the Academies of Paris could boast—Bossuet, Vauban, and Buffon. His father, Claude Abraham Carnot, was a distinguished advocate, who “followed this noble profession with much talent, which is not rare, and with great disinterestedness, which is said not to be so common.” He was descended from a family which, since the fifteenth century, had given to the priesthood and to the army more than one remarkable man. Out of a numerous family of *eighteen* children, two lived to be lieutenant-generals of the French army, one a counsellor in the Court of Cassation, one a procureur-général of the Cour Royale, one a directress of the hospital of Nolay, and one a municipal magistrate, highly esteemed when he discharged the duties of his Commune, but if possible still more esteemed when after twenty years of service he submitted, at the Re-

storage, to dismissal from his office rather than abandon his duty.*

The education of Lazare Carnot, the subject of this Article, was superintended by his father till he was qualified for the college of Autun. When he was only ten years of age, he accompanied his mother in a journey to Dijon, which she had at that time occasion to make; and as a reward for his habitual docility, she took him to the theatre. It was at that time the custom to exhibit on the stage the evolutions of troops, in which battles followed one another in succession.

"The scholar," says M. Arago, "followed with the deepest attention the series of events which were gradually developed before him; but all on a sudden he rose up, became excited, and in spite of his mother's efforts, he questioned, in no very civil terms, a personage who had just appeared on the stage, and who was the commander of the troops, in whose movements the young Carnot had felt an interest. The juvenile soldier announced to the unskilful commander that his artillery was ill placed, that the artillerymen so exposed could not fail to be killed by the first shots of musketry that were fired from the rampart of the fortress they were about to attack, and that if he were to establish his battery behind a certain rock which he pointed out both by word and gesture, the soldiers would be much less exposed. The actors thus interdicted did not know what to do. Madame Carnot was shocked at the disorder which her son had occasioned;—the house was convulsed with laughter;—every one sought for an explanation of so unusual a frolic, which turned out to be nothing more than the germ of a high military intelligence,—the first symptom of that superior genius which, disdaining beaten paths, created some years afterwards a new system of tactics, and proposed to replace the fortifications so skilfully and ingeniously combined by Vauban by a totally different system."—*Biographie*, pp. 3, 4.

Between his twelfth and his fifteenth year Carnot followed the course of study which prevailed in the college of Autun, where he was distinguished by his quickness and originality, and by a degree of intelligence far from common. At sixteen years of age he had finished his philosophy; and at this early period that decision of character became apparent which we shall have occasion to admire in the course of his most stormy career. The learned professors of the seminary of Autun experienced its effects when their scholar had to support his thesis in public. At this ceremony every individual in the audience was entitled to start objections; and the reputation of a great establishment was thus placed at the mercy of a stupid youth. Hence it had become the custom to permit

* The reader will find interesting notices of these five brothers in the *Biographie Universelle et Portative des Contemporains*, tom. i. pp. 783-791, Paris, 1834; and in another work, *Biographie Universelle Ancienne et Moderne*, vol. lx. pp. 178-192, he will find an account of Carnot and his elder brother, who died in 1835.

a prompter to assist the scholars in the defence of their theses, and it often happened that in aiding their memory and suggesting a new train of thought he was himself dragged into the controversy.

“According to use and wont,” says M. Arago, “the body of professors in the college of Autun were on their way to the public hall, where a large audience had assembled, when young Carnot intimated that he intended to support his thesis without a prompter, that he would on no account confine himself to the task which had been assigned him, and that he would either perform his part alone, or not perform it at all. This resolution was alternately deprecated by entreaties and assailed with threats; but the remonstrances of the professors were in vain, and they were obliged to submit unconditionally to the caprice of the scholar. The most brilliant success, however, soon justified it in the eyes of the irritated professors. The resolution of Carnot, and an incident sufficiently singular, gave an interest to the proceedings. A lady, the wife of a Doctor of Medicine, became the most formidable adversary of the young Rhetorician, and argued with him in Latin with a power of logic, a grace and an elegance of language, at which Carnot and the audience were the more astonished, as Madame L’Homme had hitherto discreetly concealed from her friends that she had extended her studies beyond the *Cuisinière bourgeoise*, the *Almanach de Liège*, and the *Petit Paroissien*.”—*Biographie*, pp. 5, 6.

At this period of his life, Carnot was so impressed with the religious principle, and with those minute forms of devotion which were scrupulously followed in the seminary at Autun, that some of his friends proposed that he should take orders in the Church; but though this suggestion was strengthened by the recollection that Canons, Vicars-General of the diocese of Chalons, Doctors of the Sorbonne, and an Abbé of Cîteaux had been members of his family, the love of military glory prevailed, and young Carnot was sent to a special school in Paris to prepare for his examination. Among his companions at this seminary, his religious opinions and habits were the subjects of continual sarcasm. But sarcasms were not arguments in the mind of Carnot, and he found it necessary to ripen by reflection and study, those sentiments and opinions which he had hitherto cherished. Theology thus became for some months the only occupation of the Apprentice Officer, but no person can now say what were the results of his studies, for, as M. Arago informs us, he carefully avoided, even in the midst of his family, not only discussions but even conversations on the subject of religion. “We know only,” says his biographer, “that he professed principles adopted by all honest and enlightened minds.” “Universal toleration* is the

* The doctrine of religious toleration, adopted and practised by all the Churches of Christendom, but the *Catholic Church*, was maintained, even in an in-

dogma which I boldly profess. I abhor fanaticism, and I believe that the fanaticism of irreligion, made fashionable by the Marats and Père Duchênes is the most dreadful of all. We must not kill men in order to force them to believe. We must not kill them to prevent them from believing. Let us compassionate the failings of others, as each of us has his own ; and allow our prejudices to be removed by time when we cannot cure them by Reason."

From the study of Theology, Carnot passed to that of Geometry and Algebra, in which he made a rapid and brilliant progress. M. Longprès, the director of the preparatory school, was acquainted with the illustrious D'Alembert, who, in one of the visits which he occasionally paid to the school, particularly noticed Carnot, and addressed to him some flattering and prophetic words, which our colleague repeated with emotion even at those epochs of his life when Fortune had made him one of the arbiters of the destinies of Europe.

Previous to the French Revolution, no individual, however distinguished, could be admitted an Officer of Artillery, unless he belonged to the class of nobles. We have already seen in our review of M. Arago's *Life of Baron Fourier*, that when, under the patronage of the illustrious Legendre, Fourier applied for permission to be examined for the artillery, the minister replied that as he was not noble he could not be admitted, even if he were a second Newton. At an earlier period, the united labours of a genealogist and a geometer were not required in the examination of an officer of engineers. Every Frenchman in 1771 could be admitted into the school of engineers at Mezières, provided their father or their mother had not enriched their family or their country by commerce or by manual labour, and it was under this system, less rigorous than that which had excluded Fourier, that Carnot was admitted an officer of engineers. Bossut, his examiner, certified his great mathematical acquirements ; and his father had no difficulty, as M. Arago observes, "in proving that never had one of his ships been in a distant country exchanging the fruits of the French soil and of French industry, against the productions which nature had reserved for other climates ;—that his hands had never combined the moveable types of Guttenberg—not even to reproduce the Bible or the Gospels ;—and that he had never personally

tolerant age, by Marshal Vauban, who published a work, entitled *Mémoires sur le Rétablissement de l'Edit de Nantes*. In the three Memoirs which it contains, Vauban demonstrates the necessity of re-establishing the Edict of Nantes, and maintaining religious toleration. This distinguished soldier published also *Mémoire sur les Limites de la Puissance Ecclésiastique, dans les choses temporelles*, which might be perused with advantage by the statesmen of the present day.

concurred in the execution of any of those admirable instruments which measure time or sound the depths of space. When these negative merits were legally proved, young Carnot was declared to be of a sufficiently good family to wear the epaulette, and he received without delay that of second lieutenant."

In the school of engineers, which he entered at the age of eighteen, he studied descriptive geometry and the physical sciences, under the celebrated Monge, and so rapid was his progress, that on the 12th January 1773, he was sent to Calais as first lieutenant in the service of fortresses, where the influence of the tides added a new and important condition to the very complicated data of the problem of fortification. In this position he acquired, among the officers of the garrison, the character of an *original*, choosing to live in libraries rather than in cafés, and preferring Thucydides and Polybius and Cæsar to the licentious works of the day.

M. Arago has justly remarked that scientific discoveries, such as the mariner's compass and the steam-engine, from which the greatest advantages might have been expected, were received at their publication with a disdainful indifference,—political events and great military achievements enjoying the exclusive privilege of moving the public mind. To this rule he mentions two exceptions, the discovery of America, and the invention of balloons,—events which have immortalized the names of Columbus and Montgolfier. From the conquest of the sea by the frail bark of the Spanish navigator, and from the conquest of the atmosphere by the still frailer balloon of the French *savant*, men of speculative and ardent minds anticipated results which time has yet refused to realize. The Spaniard gloated over the gold and the gems which the new world was to yield; and the Frenchman, more sanguine still, but more rationally sanguine, looked forward to the advancement of science, as well as to the accumulation of wealth.

"In France," says M. Arago, "every one according to the turn of his mind made a different but a seducing application of the new faculty, I had almost said the new organs, which man was about to receive from the hands of Montgolfier. The natural philosopher, transported to the region of meteors, and catching nature in the very fact, might perceive at a single glance the mystery of the formation of lightning, snow, and hail. The geographer, taking advantage of a favourable wind, might explore without danger and without fatigue, those polar zones which accumulated ice seemed to have for ever withdrawn from our view, and those central regions of Africa, New Holland, Java, Sumatra, and Borneo, no less barred against our enterprises by a burning climate, than by the animals and ferocious races which they feed. Certain generals thought of devoting themselves to the study of systems of artillery fortification, which could be opposed to ene-

mies in a balloon ; while others devised new systems of tactics applicable to battles in the air. Projects like these, which might have been borrowed from Ariosto, might have satisfied the most adventurous and enthusiastic minds. But it was not so. The discovery of balloons, notwithstanding the brilliant cortege with which every person surrounded it according to his own fancy, appeared but as the precursor of still greater discoveries. Nothing, indeed, should appear impossible to him who had subjugated the atmosphere. The idea assumed every shape. Youth was carried away with it, and age made it the text of a thousand bitter regrets. The lady of Marshal Villeroi, an invalid in her 80th year, was carried almost by force to one of the windows of the Tuileries, for she did not believe in balloons. The balloon, now detached from its moorings, our colleague, M. Charles, being seated in the car and gaily saluting the public, rose majestically in the air. Passing in an instant from the most complete incredulity to an unlimited confidence in the power of the human mind, the aged Maréchale fell upon her knees, and with her eyes bathed in tears, allowed these sad words to escape her : ‘ Yes—it is decided—it is certain—these men will discover the secret of not dying, but this will be when I am dead.’ ”—*Biographie, &c.*, pp. 12, 13.

With very different feelings, though not without enthusiasm, was this magnificent spectacle viewed by Carnot, who, at the mature age of thirty, had become captain of engineers. He believed in the possibility of directing balloons, and therefore in those applications of them which science and the art of war had expected ; and he submitted to the Academy of Sciences a memoir, containing an arrangement of light oars, by which the balloon could be steered. This memoir has not yet been recovered, but M. Arago promises to make a careful search for it, and should it add to the author's reputation, to publish it along with a memoir of the same kind by another academician, the accomplished Meunier, who fell fighting for his country on the ramparts of Mayence.

In the year 1783 the Academy of Dijon having offered a prize for an Eloge of Field-Marshal Vauban, a native of Burgundy, it was carried off by Carnot, whose “ *Eloge de Vauban* ” was published in 1784.* Fontenelle had already written the life of the illustrious Marshal with his usual eloquence and power, but by omitting to view his character in one of its most interesting phases, he left room for a better portrait from the pencil of Carnot. “ One would have thought,” says M. Arago, “ that an

* In 1785 the French Academy proposed the *Eloge of Vauban* as the subject of a prize, which was gained in 1790 by M. Noel. On the 26th May 1808, when the heart of Vauban, which had been placed under his bust in front of the tomb of Marshal Turenne, was deposited in the Church of the Invalids in Paris, in the presence of the Ministers of War and Marine, and several Marshals of France, an Eloge was pronounced upon Vauban by Carnot, General Dembarre, and M. Noel.—*Biog. Universelle*, tom. xlviii. p. 13.

Eloge of Vauban from the pen of an officer of engineers, would have consisted chiefly in an appreciation of those systems of attack and defence which he bequeathed to the art of war. But this was not the plan which Carnot adopted. It was on account of the qualities of his heart, his virtues and his patriotism, that Vauban appeared to him worthy of admiration.”—“Vauban,” says Carnot, “was one of those men whom nature gave to the world fully equipped for its service; imbued like the bee with an inborn activity for the general good, who could not sever their lot from that of the Republic, and who, themselves integral members of society, live, prosper, suffer, and languish with it.”

It is interesting at the present time, when great social questions are keenly agitated throughout the civilized world, to observe that even in the time of Louis XIV., as well as immediately before the French Revolution, the principles of Socialism had taken a deep hold of powerful and enlightened minds.

“The *Dixme Royale*,” * says M. Arago, “a work which, under Louis XIV., led to the disgrace of Vauban, and of which Fontenelle had the prudence not even to quote the title, in his enumeration of the works of the illustrious Marshal, is described by Carnot as a simple and pathetic exposé of facts,—a work in which ‘every thing strikes by its precision and truth.’ The distribution of taxes in France appeared barbarous to a young officer, and the manner of collecting them more barbarous still.† According to him, the true object of a government is to compel every member of the State to labour, and the means which he points out to obtain this result is (to use his own words) to make riches pass from those hands in which they are superfluous into those where they are necessary. Carnot adopted without reserve this precept of Vauban—that the laws ought to prevent the frightful misery of the one, and the excessive opulence of the other. He assails the odious multiplicity of privileges from which the most numerous classes of the population had then so much to suffer, and after having divided men into two classes, the workers and the idlers, he goes the length of saying of the latter, with whom, according to him, we are exclusively occupied in constituting modern societies, that ‘they begin only to be useful when they die, for they vivify the ground only when they return to it.’”—*Biographie*, pp. 16, 17.

Notwithstanding the boldness and the danger of these opinions, the Academy of Dijon crowned in 1784 the Memoir

* The project of the *Dixme Royale* is said by his biographer in the *Biog. Universelle*, not to have been published till 1707. It was reprinted in 1709; but nobody durst print the concluding memoir entitled *Raisons secrètes, et qui ne doivent être exposées qu’au Roi seul, qui s’opposeraient à l’établissement du système de la Dixme Royale*. These reasons are the subject of a long chapter on abuses and the persons who are interested in maintaining them.

† How applicable is this sentiment to the unwise and the unjust system of taxation which has so long thrown discredit upon British statesmanship.

which contained them ; and dictated to Buffon, whom nobody will accuse of being a reformer in matters of government, the following expressions, so flattering to the author :—" Your style is noble and flowing, you have executed a work both agreeable and useful." Prince Henry of Prussia, too, who was present when the Eloge was read and crowned, not only expressed the pleasure which it had given him, but offered its author a place in the service of his brother, Frederick the Great. The Prince of Condé, likewise, who presided at the meeting as governor of Burgundy, added his applause to that of the Prince ;—the same Condé whom Worms a few years afterwards saw at the head of the emigrant nobility, and who afterwards denounced the Revolution of 1789 as an effect without a cause—and as a meteor, the arrival of which nobody could have foreseen. In reference, and in reply to this sentiment, M. Arago makes the following profound remarks :—

" The moral transformations of society are subject to the law of continuity : they spring up and acquire magnitude, like the productions of the soil, by insensible gradations. Every age develops, discusses, and assimilates, to a certain extent, truths, or, if you choose, principles, the conception of which belongs to the preceding age. This work of the mind passes, in general, unperceived by the vulgar ; but when the day of application arrives—when principles demand to be acted upon—when they wish to penetrate into political life, ancient interests, invoking in their favour this same antiquity, rise up, resist and combat them, and society is shaken to its very foundations. The picture will be complete, when we add, that in these bloody struggles it is never principles which yield."—*Biographie*, pp. 17, 18.

M. Arago has described at great length, and with his usual power, an interesting episode in the history of Carnot, which originated in an ambiguous expression in his *Life of Vauban*, and which in its development threw him into the Bastille. In speaking of the technical part of the works of Vauban, he had occasion to say that *a certain ignorant and vulgar person* took an erroneous view of fortification, by reducing it to the art of tracing, upon paper, lines subject to conditions more or less systematic. These words were, without any reason, applied to himself by the Marquis of Montalembert, a member of the Academy of Sciences, and a general officer in the French army. He had written a work entitled *Fortification Perpendiculaire*, containing a new method of defending fortified places, which had been bitterly attacked by almost the whole corps of engineers ; and believing, and persisting in the belief, that the expression used by Carnot applied to himself, he sought his revenge by publishing an edition of the Eloge on Vauban, with notes, outrageously offensive to Carnot, and calculated to crush for ever the rising

officer of engineers. In this difficult position Carnot shewed himself what he has ever since been, frank, loyal, and insensible to injuries which he did not deserve. "Had there been," said he, in writing to his fiery antagonist, "any ground for your suspicions, I should have misunderstood the first duties of honour and of decency: I should have failed especially in that infinite respect which soldiers owe to a distinguished general. Believe me, there is no officer of engineers who has not learned with pleasure that the Marquis of Montalembert has fortified places, as well as the brave D'Esse* has defended them. Your work, he added, is full of genius. Provided your casemates are known and proved, fortification will take a new form, and become a new art. . . . Though the corps of engineers has not the advantage of possessing you, we believe that we have no less the right of reckoning you among its most illustrious members. Whoever enlarges our knowledge, whoever furnishes us with new means of being useful to France, becomes our colleague, our chief, our benefactor." With so flattering a testimony to his merits, M. de Montalembert was completely overcome, and the most formal apology for his unfortunate pamphlet followed the noble reply of Carnot.

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“Were I not afraid of the extreme credulity which would at first attach to my words, I would make the additional remark, that this same theorem of analysis and mechanics has also played a great part in the numerous events of our (First) Revolution, the character of which the determinations of Carnot might have changed. Encouraged in my youth by the kindness and friendship with which Carnot had the goodness to honour me, I occasionally took the liberty of calling his attention to those great epochs of our revolutionary annals, where parties in their mad convulsions were extinguished, overcome, or only appeased by sudden and violent measures—by real *coups d'Etat*. I then asked our colleague, how he alone among the rest had constantly expected to gain his objects without personal danger, and without being attainted by law. His answer, which was always the same, has been deeply engraven on my memory. But what was my surprise when quitting the circle of studies which a young astronomer ought to pursue, I found in so many words the constant answer to which I allude in the enunciation of a mechanical theorem; and when I saw that our colleague had always spoken to me of the political organization of society precisely as he speaks in his work of a machine, in which sudden changes necessarily produce great waste of power, and, sooner or later, lead to the complete dislocation of the system.

“Is it then true, gentlemen, that in our human weakness the loftiest minds have so little confidence in the soundness and wisdom of those determinations to which their heart prompts them, that they require to confirm and to strengthen them by more or less forced resemblances? This doubt will not surprise you, if I add, that in all difficult emergencies, one of the philosophers, whose labours have thrown the greatest lustre on this Academy, was led to regulate his conduct on the following very accommodating maxims: ‘Water takes exactly the shape of the vessel which contains it—a sound mind ought, with the same fidelity, to model itself upon the circumstances of the moment.’ I might also quote another of our colleagues, not less celebrated, when a certain personage one day asked him in my presence, by what secret he had, without injury, passed through the terrible epochs of our civil disorders: ‘Every country in revolution,’ replied he, ‘is a carriage whose horses have taken the bit between their teeth;—to try to stop the horses is to rush heedlessly to a catastrophe: He who leaps from a carriage runs the risk of being crushed beneath its wheels—the best way is to leave it to itself and shut your eyes, as I did.’”—*Biographie, &c.*, pp. 28-30.

storation, to dismissal from his office rather than abandon his duty.*

The education of Lazare Carnot, the subject of this Article, was superintended by his father till he was qualified for the college of Autun. When he was only ten years of age, he accompanied his mother in a journey to Dijon, which she had at that time occasion to make; and as a reward for his habitual docility, she took him to the theatre. It was at that time the custom to exhibit on the stage the evolutions of troops, in which battles followed one another in succession.

"The scholar," says M. Arago, "followed with the deepest attention the series of events which were gradually developed before him; but all on a sudden he rose up, became excited, and in spite of his mother's efforts, he questioned, in no very civil terms, a personage who had just appeared on the stage, and who was the commander of the troops, in whose movements the young Carnot had felt an interest. The juvenile soldier announced to the unskilful commander that his artillery was ill placed, that the artillerymen so exposed could not fail to be killed by the first shots of musketry that were fired from the rampart of the fortress they were about to attack, and that if he were to establish his battery behind a certain rock which he pointed out both by word and gesture, the soldiers would be much less exposed. The actors thus interdicted did not know what to do. Madame Carnot was shocked at the disorder which her son had occasioned;—the house was convulsed with laughter;—every one sought for an explanation of so unusual a frolic, which turned out to be nothing more than the germ of a high military intelligence,—the first symptom of that superior genius which, disdaining beaten paths, created some years afterwards a new system of tactics, and proposed to replace the fortifications so skilfully and ingeniously combined by Vauban by a totally different system."—*Biographie*, pp. 3, 4.

Between his twelfth and his fifteenth year Carnot followed the course of study which prevailed in the college of Autun, where he was distinguished by his quickness and originality, and by a degree of intelligence far from common. At sixteen years of age he had finished his philosophy; and at this early period that decision of character became apparent which we shall have occasion to admire in the course of his most stormy career. The learned professors of the seminary of Autun experienced its effects when their scholar had to support his thesis in public. At this ceremony every individual in the audience was entitled to start objections; and the reputation of a great establishment was thus placed at the mercy of a stupid youth. Hence it had become the custom to permit

* The reader will find interesting notices of these five brothers in the *Biographie Universelle et Portative des Contemporains*, tom. i. pp. 783-791, Paris, 1834; and in another work, *Biographie Universelle Ancienne et Moderne*, vol. lx. pp. 178-192, he will find an account of Carnot and his elder brother, who died in 1835.

a prompter to assist the scholars in the defence of their theses, and it often happened that in aiding their memory and suggesting a new train of thought he was himself dragged into the controversy.

“According to use and wont,” says M. Arago, “the body of professors in the college of Autun were on their way to the public hall, where a large audience had assembled, when young Carnot intimated that he intended to support his thesis without a prompter, that he would on no account confine himself to the task which had been assigned him, and that he would either perform his part alone, or not perform it at all. This resolution was alternately deprecated by entreaties and assailed with threats; but the remonstrances of the professors were in vain, and they were obliged to submit unconditionally to the caprice of the scholar. The most brilliant success, however, soon justified it in the eyes of the irritated professors. The resolution of Carnot, and an incident sufficiently singular, gave an interest to the proceedings. A lady, the wife of a Doctor of Medicine, became the most formidable adversary of the young Rhetorician, and argued with him in Latin with a power of logic, a grace and an elegance of language, at which Carnot and the audience were the more astonished, as Madame L’Homme had hitherto discreetly concealed from her friends that she had extended her studies beyond the *Cuisinière bourgeoise*, the *Almanach de Liège*, and the *Petit Paroissien*.”—*Biographie*, pp. 5, 6.

At this period of his life, Carnot was so impressed with the religious principle, and with those minute forms of devotion which were scrupulously followed in the seminary at Autun, that some of his friends proposed that he should take orders in the Church; but though this suggestion was strengthened by the recollection that Canons, Vicars-General of the diocese of Chalons, Doctors of the Sorbonne, and an Abbé of Cîteaux had been members of his family, the love of military glory prevailed, and young Carnot was sent to a special school in Paris to prepare for his examination. Among his companions at this seminary, his religious opinions and habits were the subjects of continual sarcasm. But sarcasms were not arguments in the mind of Carnot, and he found it necessary to ripen by reflection and study, those sentiments and opinions which he had hitherto cherished. Theology thus became for some months the only occupation of the Apprentice Officer, but no person can now say what were the results of his studies, for, as M. Arago informs us, he carefully avoided, even in the midst of his family, not only discussions but even conversations on the subject of religion. “We know only,” says his biographer, “that he professed principles adopted by all honest and enlightened minds.” “Universal toleration* is the

* The doctrine of religious toleration, adopted and practised by all the Churches of Christendom, but the *Catholic Church*, was maintained, even in an in-

dogma which I boldly profess. I abhor fanaticism, and I believe that the fanaticism of irreligion, made fashionable by the Marats and Père Duchênes is the most dreadful of all. We must not kill men in order to force them to believe. We must not kill them to prevent them from believing. Let us compassionate the failings of others, as each of us has his own ; and allow our prejudices to be removed by time when we cannot cure them by Reason."

From the study of Theology, Carnot passed to that of Geometry and Algebra, in which he made a rapid and brilliant progress. M. Longprès, the director of the preparatory school, was acquainted with the illustrious D'Alembert, who, in one of the visits which he occasionally paid to the school, particularly noticed Carnot, and addressed to him some flattering and prophetic words, which our colleague repeated with emotion even at those epochs of his life when Fortune had made him one of the arbiters of the destinies of Europe.

Previous to the French Revolution, no individual, however distinguished, could be admitted an Officer of Artillery, unless he belonged to the class of nobles. We have already seen in our review of M. Arago's *Life of Baron Fourier*, that when, under the patronage of the illustrious Legendre, Fourier applied for permission to be examined for the artillery, the minister replied that as he was not noble he could not be admitted, even if he were a second Newton. At an earlier period, the united labours of a genealogist and a geometer were not required in the examination of an officer of engineers. Every Frenchman in 1771 could be admitted into the school of engineers at Mezières, provided their father or their mother had not enriched their family or their country by commerce or by manual labour, and it was under this system, less rigorous than that which had excluded Fourier, that Carnot was admitted an officer of engineers. Bossut, his examiner, certified his great mathematical acquirements ; and his father had no difficulty, as M. Arago observes, "in proving that never had one of his ships been in a distant country exchanging the fruits of the French soil and of French industry, against the productions which nature had reserved for other climates ;—that his hands had never combined the moveable types of Guttenberg—not even to reproduce the Bible or the Gospels ;—and that he had never personally

tolerant age, by Marshal Vauban, who published a work, entitled *Mémoires sur le Rétablissement de l'Edit de Nantes*. In the three Memoirs which it contains, Vauban demonstrates the necessity of re-establishing the Edict of Nantes, and maintaining religious toleration. This distinguished soldier published also *Mémoire sur les Limites de la Puissance Ecclésiastique, dans les choses temporelles*, which might be perused with advantage by the statesmen of the present day.

concurred in the execution of any of those admirable instruments which measure time or sound the depths of space. When these negative merits were legally proved, young Carnot was declared to be of a sufficiently good family to wear the epaulette, and he received without delay that of second lieutenant."

In the school of engineers, which he entered at the age of eighteen, he studied descriptive geometry and the physical sciences, under the celebrated Monge, and so rapid was his progress, that on the 12th January 1773, he was sent to Calais as first lieutenant in the service of fortresses, where the influence of the tides added a new and important condition to the very complicated data of the problem of fortification. In this position he acquired, among the officers of the garrison, the character of an *original*, choosing to live in libraries rather than in cafés, and preferring Thucydides and Polybius and Cæsar to the licentious works of the day.

M. Arago has justly remarked that scientific discoveries, such as the mariner's compass and the steam-engine, from which the greatest advantages might have been expected, were received at their publication with a disdainful indifference,—political events and great military achievements enjoying the exclusive privilege of moving the public mind. To this rule he mentions two exceptions, the discovery of America, and the invention of balloons,—events which have immortalized the names of Columbus and Montgolfier. From the conquest of the sea by the frail bark of the Spanish navigator, and from the conquest of the atmosphere by the still frailer balloon of the French *savant*, men of speculative and ardent minds anticipated results which time has yet refused to realize. The Spaniard gloated over the gold and the gems which the new world was to yield; and the Frenchman, more sanguine still, but more rationally sanguine, looked forward to the advancement of science, as well as to the accumulation of wealth.

"In France," says M. Arago, "every one according to the turn of his mind made a different but a seducing application of the new faculty, I had almost said the new organs, which man was about to receive from the hands of Montgolfier. The natural philosopher, transported to the region of meteors, and catching nature in the very fact, might perceive at a single glance the mystery of the formation of lightning, snow, and hail. The geographer, taking advantage of a favourable wind, might explore without danger and without fatigue, those polar zones which accumulated ice seemed to have for ever withdrawn from our view, and those central regions of Africa, New Holland, Java, Sumatra, and Borneo, no less barred against our enterprises by a burning climate, than by the animals and ferocious races which they feed. Certain generals thought of devoting themselves to the study of systems of artillery fortification, which could be opposed to ene-

mies in a balloon ; while others devised new systems of tactics applicable to battles in the air. Projects like these, which might have been borrowed from Ariosto, might have satisfied the most adventurous and enthusiastic minds. But it was not so. The discovery of balloons, notwithstanding the brilliant cortege with which every person surrounded it according to his own fancy, appeared but as the precursor of still greater discoveries. Nothing, indeed, should appear impossible to him who had subjugated the atmosphere. The idea assumed every shape. Youth was carried away with it, and age made it the text of a thousand bitter regrets. The lady of Marshal Villeroi, an invalid in her 80th year, was carried almost by force to one of the windows of the Tuileries, for she did not believe in balloons. The balloon, now detached from its moorings, our colleague, M. Charles, being seated in the car and gaily saluting the public, rose majestically in the air. Passing in an instant from the most complete incredulity to an unlimited confidence in the power of the human mind, the aged Maréchale fell upon her knees, and with her eyes bathed in tears, allowed these sad words to escape her : ‘ Yes—it is decided—it is certain—these men will discover the secret of not dying, but this will be when I am dead.’ ”—*Biographie, &c.*, pp. 12, 13.

With very different feelings, though not without enthusiasm, was this magnificent spectacle viewed by Carnot, who, at the mature age of thirty, had become captain of engineers. He believed in the possibility of directing balloons, and therefore in those applications of them which science and the art of war had expected ; and he submitted to the Academy of Sciences a memoir, containing an arrangement of light oars, by which the balloon could be steered. This memoir has not yet been recovered, but M. Arago promises to make a careful search for it, and should it add to the author's reputation, to publish it along with a memoir of the same kind by another academician, the accomplished Meunier, who fell fighting for his country on the ramparts of Mayence.

In the year 1783 the Academy of Dijon having offered a prize for an Eloge of Field-Marshal Vauban, a native of Burgundy, it was carried off by Carnot, whose “ *Eloge de Vauban* ” was published in 1784.* Fontenelle had already written the life of the illustrious Marshal with his usual eloquence and power, but by omitting to view his character in one of its most interesting phases, he left room for a better portrait from the pencil of Carnot. “ One would have thought,” says M. Arago, “ that an

* In 1785 the French Academy proposed the *Eloge of Vauban* as the subject of a prize, which was gained in 1790 by M. Noel. On the 26th May 1808, when the heart of Vauban, which had been placed under his bust in front of the tomb of Marshal Turenne, was deposited in the Church of the Invalids in Paris, in the presence of the Ministers of War and Marine, and several Marshals of France, an Eloge was pronounced upon Vauban by Carnot, General Dembarre, and M. Noel. —*Biog. Universelle*, tom. xlviii. p. 13.

Eloge of Vauban from the pen of an officer of engineers, would have consisted chiefly in an appreciation of those systems of attack and defence which he bequeathed to the art of war. But this was not the plan which Carnot adopted. It was on account of the qualities of his heart, his virtues and his patriotism, that Vauban appeared to him worthy of admiration.”—“Vauban,” says Carnot, “was one of those men whom nature gave to the world fully equipped for its service; imbued like the bee with an inborn activity for the general good, who could not sever their lot from that of the Republic, and who, themselves integral members of society, live, prosper, suffer, and languish with it.”

It is interesting at the present time, when great social questions are keenly agitated throughout the civilized world, to observe that even in the time of Louis XIV., as well as immediately before the French Revolution, the principles of Socialism had taken a deep hold of powerful and enlightened minds.

“The *Dixme Royale*,” * says M. Arago, “a work which, under Louis XIV., led to the disgrace of Vauban, and of which Fontenelle had the prudence not even to quote the title, in his enumeration of the works of the illustrious Marshal, is described by Carnot as a simple and pathetic exposé of facts,—a work in which ‘every thing strikes by its precision and truth.’ The distribution of taxes in France appeared barbarous to a young officer, and the manner of collecting them more barbarous still.† According to him, the true object of a government is to compel every member of the State to labour, and the means which he points out to obtain this result is (to use his own words) to make riches pass from those hands in which they are superfluous into those where they are necessary. Carnot adopted without reserve this precept of Vauban—that the laws ought to prevent the frightful misery of the one, and the excessive opulence of the other. He assails the odious multiplicity of privileges from which the most numerous classes of the population had then so much to suffer, and after having divided men into two classes, the workers and the idlers, he goes the length of saying of the latter, with whom, according to him, we are exclusively occupied in constituting modern societies, that ‘they begin only to be useful when they die, for they vivify the ground only when they return to it.’”—*Biographie*, pp. 16, 17.

Notwithstanding the boldness and the danger of these opinions, the Academy of Dijon crowned in 1784 the Memoir

* The project of the *Dixme Royale* is said by his biographer in the *Biog. Universelle*, not to have been published till 1707. It was reprinted in 1709; but nobody durst print the concluding memoir entitled *Raisons secrètes, et qui ne doivent être exposées qu’au Roi seul, qui s’opposeraient à l’établissement du système de la Dixme Royale*. These reasons are the subject of a long chapter on abuses and the persons who are interested in maintaining them.

† How applicable is this sentiment to the unwise and the unjust system of taxation which has so long thrown discredit upon British statesmanship.

which contained them ; and dictated to Buffon, whom nobody will accuse of being a reformer in matters of government, the following expressions, so flattering to the author :—" Your style is noble and flowing, you have executed a work both agreeable and useful." Prince Henry of Prussia, too, who was present when the Eloge was read and crowned, not only expressed the pleasure which it had given him, but offered its author a place in the service of his brother, Frederick the Great. The Prince of Condé, likewise, who presided at the meeting as governor of Burgundy, added his applause to that of the Prince ;—the same Condé whom Worms a few years afterwards saw at the head of the emigrant nobility, and who afterwards denounced the Revolution of 1789 as an effect without a cause—and as a meteor, the arrival of which nobody could have foreseen. In reference, and in reply to this sentiment, M. Arago makes the following profound remarks :—

" The moral transformations of society are subject to the law of continuity : they spring up and acquire magnitude, like the productions of the soil, by insensible gradations. Every age develops, discusses, and assimilates, to a certain extent, truths, or, if you choose, principles, the conception of which belongs to the preceding age. This work of the mind passes, in general, unperceived by the vulgar ; but when the day of application arrives—when principles demand to be acted upon—when they wish to penetrate into political life, ancient interests, invoking in their favour this same antiquity, rise up, resist and combat them, and society is shaken to its very foundations. The picture will be complete, when we add, that in these bloody struggles it is never principles which yield."—*Biographie*, pp. 17, 18.

M. Arago has described at great length, and with his usual power, an interesting episode in the history of Carnot, which originated in an ambiguous expression in his *Life of Vauban*, and which in its development threw him into the Bastille. In speaking of the technical part of the works of Vauban, he had occasion to say that *a certain ignorant and vulgar person* took an erroneous view of fortification, by reducing it to the art of tracing, upon paper, lines subject to conditions more or less systematic. These words were, without any reason, applied to himself by the Marquis of Montalembert, a member of the Academy of Sciences, and a general officer in the French army. He had written a work entitled *Fortification Perpendiculaire*, containing a new method of defending fortified places, which had been bitterly attacked by almost the whole corps of engineers ; and believing, and persisting in the belief, that the expression used by Carnot applied to himself, he sought his revenge by publishing an edition of the Eloge on Vauban, with notes, outrageously offensive to Carnot, and calculated to crush for ever the rising

officer of engineers. In this difficult position Carnot shewed himself what he has ever since been, frank, loyal, and insensible to injuries which he did not deserve. "Had there been," said he, in writing to his fiery antagonist, "any ground for your suspicions, I should have misunderstood the first duties of honour and of decency: I should have failed especially in that infinite respect which soldiers owe to a distinguished general. Believe me, there is no officer of engineers who has not learned with pleasure that the Marquis of Montalembert has fortified places, as well as the brave D'Esse* has defended them. Your work, he added, is full of genius. Provided your casemates are known and proved, fortification will take a new form, and become a new art. . . . Though the corps of engineers has not the advantage of possessing you, we believe that we have no less the right of reckoning you among its most illustrious members. Whoever enlarges our knowledge, whoever furnishes us with new means of being useful to France, becomes our colleague, our chief, our benefactor." With so flattering a testimony to his merits, M. de Montalembert was completely overcome, and the most formal apology for his unfortunate pamphlet followed the noble reply of Carnot.

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absorbed and lost, it has been spent in the dislocation and destruction of the machinery.

In quitting this topic M. Arago has, with that admirable felicity of application which characterizes all his works, drawn an instructive moral from this mechanical principle ;—a moral which has been too sadly illustrated in recent events which he could scarcely have anticipated.

“Were I not afraid of the extreme credulity which would at first attach to my words, I would make the additional remark, that this same theorem of analysis and mechanics has also played a great part in the numerous events of our (First) Revolution, the character of which the determinations of Carnot might have changed. Encouraged in my youth by the kindness and friendship with which Carnot had the goodness to honour me, I occasionally took the liberty of calling his attention to those great epochs of our revolutionary annals, where parties in their mad convulsions were extinguished, overcome, or only appeased by sudden and violent measures—by real *coups d'Etat*. I then asked our colleague, how he alone among the rest had constantly expected to gain his objects without personal danger, and without being attainted by law. His answer, which was always the same, has been deeply engraven on my memory. But what was my surprise when quitting the circle of studies which a young astronomer ought to pursue, I found in so many words the constant answer to which I allude in the enunciation of a mechanical theorem ; and when I saw that our colleague had always spoken to me of the political organization of society precisely as he speaks in his work of a machine, in which sudden changes necessarily produce great waste of power, and, sooner or later, lead to the complete dislocation of the system.

“Is it then true, gentlemen, that in our human weakness the loftiest minds have so little confidence in the soundness and wisdom of those determinations to which their heart prompts them, that they require to confirm and to strengthen them by more or less forced resemblances ? This doubt will not surprise you, if I add, that in all difficult emergencies, one of the philosophers, whose labours have thrown the greatest lustre on this Academy, was led to regulate his conduct on the following very accommodating maxims : ‘Water takes exactly the shape of the vessel which contains it—a sound mind ought, with the same fidelity, to model itself upon the circumstances of the moment.’ I might also quote another of our colleagues, not less celebrated, when a certain personage one day asked him in my presence, by what secret he had, without injury, passed through the terrible epochs of our civil disorders : ‘Every country in revolution,’ replied he, ‘is a carriage whose horses have taken the bit between their teeth ;—to try to stop the horses is to rush heedlessly to a catastrophe : He who leaps from a carriage runs the risk of being crushed beneath its wheels—the best way is to leave it to itself and shut your eyes, as I did.’”—*Biographie, &c.*, pp. 28-30.

It was the fate of Carnot, as of other distinguished men, to be driven from the repose of study into the arena of political strife; but he was neither the quiet fluid, which took the form of its containing vessel, nor the contented passenger, that shut his eyes when his steeds were in gallop.—He strove to mould to a smooth and Tuscan outline the rude vessel which imprisoned him.—He grasped the safety rein of his headlong coursers, and if he did not stop them in their fiery onset, he slackened their speed, and saved them from destruction. *Injicit fræna vaganti.*

Although Carnot was one of the first officers of the French army who honestly and enthusiastically embraced the reforming principles of the National Assembly, yet his name does not occur in the annals of the Revolution till the beginning of 1791. In that year, when he was in garrison at St. Omer, he married Mademoiselle Dupont, the daughter of a rich merchant, by whom he had several children, and along with his brother, who was also a Captain of Engineers, he was chosen to represent the department of the *Pas de Calais* in the Legislative Assembly. “From this time Carnot devoted himself wholly to the discharge of those high and onerous duties which were imposed upon him by the choice of his fellow-citizens, and the suffrage of his colleagues. The geometer was almost wholly merged in the statesman, and in the former character he made only an occasional appearance.”

Writing under the dominion of Louis Philippe, M. Arago might naturally have felt himself under some restraint in speaking of that period of the life of his friend when he was one of the judges of Louis XVI. The position was doubtless a delicate one; and in yielding to the prejudices of his more timid friends, none who are acquainted with the moral courage of our author, will for a moment suppose that he either dreaded danger, or truckled to power.

“I will not speak,” says he, “of the drama which terminated in the tragical death of the successor of a hundred kings, and the overthrow of the monarchy; yet, myself a devoted partizan of the abolition of the punishment of death, I do not perceive the pretended difficulties of the position which should have prevented me from here abandoning myself publicly to the dictates of conscience. Nor can I better understand why I should abstain from making this assembly cognizant of the deep aversion which I profess for every political arrest sanctioned by a political body. Need I say, in short, that a fraternal solicitude for the memory of Carnot does not appear to demand the sacrifice which is imposed upon me. Can any one forget what contemporaneous history has recorded of the documentary charges against the thousand courtiers whose interested, hypocritical, and anti-national intrigues, threw the monarch into a labyrinth without an exit,

caused him to be pronounced guilty by the unanimous voice of the national representatives, and with more effect than the ardent democratical opinions of the Convention, rendered inevitable the catastrophe of the 21st of January? Had I descended from these high moral considerations to the minute appreciation of facts, or to their technical discussion, such as I would submit to a court of appeal or cassation, I should have found, with all right minds, with our own Daunou, for example, the illegality of the celebrated process, less in the nature of the sentence, less in the severity of the punishment inflicted, than in the composition of the tribunal itself, or than in the usurpation of power which had created it. But, gentlemen,—and I must not fail to make the remark,—when the Convention invested itself with the right of pronouncing death upon Louis XVI., when it afterwards regulated its jurisprudence, and when it assumed simultaneously the functions of accuser and judge, Carnot was absent from Paris. He was then fulfilling, with the armies, one of those important missions in which his ardent patriotism always found the secret of overcoming difficulties.”—*Biographie, &c.*, pp. 32, 33.

In recording the events of a still more stormy and difficult period of the life of Carnot, when he became a member of the Committee of Public Safety, M. Arago does not feel himself justified in being influenced by the same delicacy. The base and atrocious calumnies which his enemies have heaped upon some of the most honourable and patriotic acts of his life, have compelled our author to investigate their origin, and estimate their value during the lifetime of the colleagues and fellow-labourers of Carnot, from whom alone correct information could be obtained.

In 1793, the Convention was the only organized power in the State which was capable of opposing a bulwark against the shoals of enemies which, from every part of Europe, threatened the nationality of France. The Committee of Public Safety, formed on the 6th April, was, after some partial changes, composed, on the 11th September 1793, of *Robespierre, Saint-Just, Couthon, Collot d'Herbois, Billaud-Varennes, Prieur de la Marne, Prieur de la Côte-d'Or, Carnot, Jean-Bon-St.-André, Barère, Herault de Séchelles*, and *Robert Lindet*. The Committee thus constituted were entrusted with great powers. A majority of votes was required to decide every question, and a certain number of signatures to give these decisions the force of law. In defence of the general proceedings of this active and zealous body, M. Arago might have argued that moral and intellectual force can no more than physical force be increased by machinery: what is gained in power is lost in time; and on the events of time depended the very existence of France. The mental energies of twelve men were insufficient for the business which pressed upon them. Despatches from every part of their frontier invaded or threat-

ened with invasion,—from every city,—and even from every village, struggling against the prejudices of the privileged classes, could not receive that mature consideration which they deserved. The reconstruction of the Committee, in the face of enemies without and within, would have occasioned fresh dissensions, and deprived it of its magic power. The Committee therefore resolved upon the division of its labour. Carnot was charged with organizing the armies and superintending their operations; Prieur of the Côte-d'Or with the armaments; Robert Lindet with the army stores; and the other members were reserved for matters of politics, general police, and measures of safety. In every kind of question a single signature was serious, and involved responsibility, though the law required as a formality that the other signatures should be added. The imprudence of such a system is equalled only by its danger—a danger as great to the possessor as to the victim of power. “In permitting himself to countersign without examination the decisions of his colleagues, Carnot,” as our author remarks, “made the greatest of all sacrifices to France: he placed his honour in the hands of several of his declared enemies; but, counting on the tardy justice of posterity, he illustrated that motto, almost superhuman, of one of the most powerful organizations which revolution ever raised from the popular will—that motto which every sincere patriot with an ardent temperament may well avow, ‘*Let my reputation perish rather than my country.*’”

While M. Arago gives the highest praise to the Committee of Public Safety for the vigorous and energetic acts by which they saved their country at the risk of their honour and their life, he does not scruple to denounce the cruelties of which they were guilty.

“But soon, gentlemen,” says he, “their firmness degenerated into frenzy;—but soon they immolated the rich only for their riches;—but soon terror reigned from one end of France to the other:—It carried grief and despair indiscriminately into the family of the simple soldier, as well as into that of the general; it seized its victims in the humble dwelling of the artizan, as well as in the gilded palace of the ancient duke and peer; it spared neither age nor sex; it blindly struck at all opinions; and at last, adding dissimulation to cruelty, it parodied the very forms of justice! At such a spectacle, gentlemen, the heart becomes callous, hope withers, and the liveliest and most ardent sympathies give place to the profoundest grief.

“I know that some have explained and even excused these bloody saturnalia, by invoking the popular will. If I can judge of the people of '93, whom I did not know, by the people whom I have seen at work in 1830, the explanation is false,—and I scruple not to say it. In a moment of effervescence and tumult the people are often driven

to culpable acts, but never are they associated with daily barbarities. We degrade them if we allege that terror alone may make them march to encounter bands of their enemies ; and we no less mistake their sentiments when we insinuate that they desired the death of one of the members of this Academy who honoured France by his genius, and the death of another of our colleagues, who honoured the human species by his virtues. No, gentlemen ; in the noble country of France, the death of Lavoisier, the death of Malesherbes, could not have been commanded by any consideration of public safety. There is no apology for crimes like these : we must denounce them to-day, we must denounce them to-morrow, we must denounce them always. Devoted by sentiment, by conviction, by the irresistible power of logic, to the worship of liberty, we spurn the execrable thought—that the scaffold is the inevitable auxiliary of democracy.”*—*Biographie, &c.*, pp. 37-39.

Bitterly as we must denounce the cruelties of the Committee of Public Safety, and associate the name of Robespierre with its most sanguinary acts, we are bound, on the strength of the evidence adduced by M. Arago, to absolve Carnot from the charges which have been brought against him as a member of that hated body : at no period, and under no circumstances, in his long political career, was he, in the bad sense of the term, a party man, who strove to carry out his principles and his plans by those tortuous ways which honour and justice forbid. As chairman of the Commission of the 9th June 1792, charged with proposing compensation to the families of Théobald, Dillon, and Berthois, who had been massacred before Lille, by their own troops, Carnot did not, as others would have done, make a compromise with his duty, and try to soothe the susceptibility of the army. He denounced the brutal act in these burning words :—“ I will not repeat,” he exclaimed, “ the circumstances of this atrocity. Posterity, in reading our history, will believe that they see in it the crime of a horde of cannibals rather than that of a free people.”

In 1792, when the National Guard had volunteered to form an army of reserve at Soissons, a report was circulated through Paris that their stores of flour had been poisoned, and that 200 soldiers had perished. The Parisian populace became exasperated : the Court had disapproved of the armament ; and the base act of poisoning its food was ascribed to the king, and even to the queen, and their adherents. Carnot was sent to the camp as commissary to make the necessary investigations. Under his rigorous inquest the slander and its danger at once disappeared.

* The recent revolutions in 1848 have afforded a satisfactory proof of the truth of this opinion.

No soldiers had perished, because no flour had been poisoned. The ball of some youths at play had detached pieces of glass from the windows of an old church, and some of them had fallen, not in powder but in pieces, into a single sack of corn !

From the bureaux of the Committee of Public Safety our author might have collected many striking proofs of the kindness and indulgence of Carnot towards those who held political opinions different from his own, but he has wisely rested his defence upon more general considerations. "The Convention," says he, "was the arena where the heads of those factions which divided the country went to contend ; but it was in the clubs where their adherents were formed, and also that energetic force, the action of which often annulled the effects of the most eloquent harangues. If the Convention saw the bursting of the thunderbolt, it was out of its bounds that the storm began to gather till it grew and attained an irresistible power. There was not then a single influential politician who was not obliged to appear every day at the *Jacobins* or at the *Cordeliers*, and take a part in every debate. But, gentlemen, Carnot did not belong to any of these associations ; never was a word of his heard in the clubs :—At this time of trouble, Carnot was exclusively a *Man of the Nation*."

It is no slight proof of the correctness of these views, that Robespierre and his more violent associates viewed with jealousy, and even indignation, the moderate conduct of their military colleague. "To be led away," cried Robespierre, in one of his harangues, "by every military operation, is an act of selfishness ;—to repose obstinately, or take no part in the affairs of police in the interior, is to enter into terms of accommodation with the enemies of the country." "I am distressed," said he to Cambon on another occasion, "that I do not understand that construction of lines and of colours which I see upon their charts. Ah ! had I but studied the art of war in my youth, I should not have been obliged, whenever we discuss the subject of our armies, to tolerate the supremacy of the odious Carnot." This animosity had its origin in Carnot's disapproval of the Coup d'Etat, which led to the fall of the Girondists ; and such was the feeling entertained against him for his moderation, that Saint-Just demanded that he should be put upon his trial for having refused, when with the army of the north, to sign an order for the arrest of General O'Moran : but he escaped from the vengeance which would have thus fallen upon him, because it was impossible in the estimation of his enemies, as well as his friends, to replace him in his military position by a member of the Convention.

We have already referred to the greatness of the sacrifices which Carnot was obliged to make in sanctioning by his name

the acts of his associates; and we cannot better illustrate the principle upon which such a sacrifice was made, than to mention the fact, that he was thus led to sign, in ignorance, the arrest of his own secretary, and of the very restaurateur whom he employed! But though the signature of Carnot may have often given its sanction to an act of cruelty, yet we know that that act would have been performed without it; and in estimating the amount of crime to which he may have been indirectly a party, we learn with the deepest satisfaction from the works of the Royalists themselves, and from the published writings of the Republicans, that “in the Committee of Public Safety *Carnot had saved more lives than his colleagues had sacrificed.*” From the meetings of the Committee he was never absent, excepting when his military duties absorbed all his attention, and whenever he was present innocence could always reckon upon him as its bold and affectionate advocate. “Chance,” says M. Arago, “led me a few days ago to discover, that the part of a kind defender was not the only one which he had performed. There is among you, gentlemen, a venerable academician, equally versed in mathematical theories and in their application: who has gloriously associated his name with useful works and vast undertakings, which the future may yet realize. He has run through a long career without making, and certainly without deserving, an enemy; yet his life was one day menaced, and the miscreants wished to effect his fall when he was rearing one of those scientific monuments which have thrown the brightest lustre on the revolutionary era. An anonymous letter intimated to our colleague the danger to which he was exposed. The storm was dispersed, but it might again from time to time recur: The friendly hand pointed out a plan of conduct, suggested prudential cautions, and indicated the necessity of finding a place of retreat. It promised not to leave its work unfinished, and to resume the pen if danger reappeared. The anonymous writer, gentlemen, was Carnot—the geometer whom he thus preserved to science and our affections, was M. de Prony!”

At this time, as M. Arago informs us, M. de Prony and Carnot had never even seen one another. At a later period, in 1814, we had the privilege of seeing them together on the floor of the Institute—the one rejoicing in the peaceful pursuit of his studies, and in the friendship of the illustrious Watt, by whom we had just been introduced to him; and the other mourning over the subjugation of France, dejected, though lofty in his mien,—as if he already saw that duty to his country might yet summon him into the field, or drive him into exile.

In order rightly to understand the position of Carnot when, in August 1793, he became a member of the Committee of Public

Safety, we must look more narrowly into the state of France. "The wreck of the army under Dumouriez had been driven from one position to another:—Valenciennes and Condé had opened their gates to the enemy; Mayence had capitulated under the pressure of famine; two Spanish armies had invaded France; forty thousand Vendéans under Cathelineau had taken Bressuire, Thouars, Saumur, and Angers—threatened Tours and Le Mans, and attacked Nantes by the right bank of the Loire, while Charette operated upon the left. Toulon had received into its harbour an English squadron, and our principal towns, Marseilles, Caen, and Lyons, had separated themselves violently from the Central Government." Under such circumstances all Europe looked for the overthrow of the Convention, and the submission of France. But they had formed an erroneous estimate both of the patriotism and the resources of the nation. Carnot was charged with the organization and direction of its armies, and he nobly fulfilled the mission which was intrusted to him. With almost sovereign power, he introduced order and system into the army. He united all the various elements of the service, reading every despatch, and availing himself of the suggestions and talents of the humblest of his officers. It was at this time that the young Hoche, a serjeant of infantry, composed his Memoir on the means of penetrating into Belgium, a work which drew from Carnot the prophetic exclamation, "Behold a serjeant of infantry who will make his way!" The general's eye followed him in every battle, and in the course of a few months Hoche became captain, colonel, general of brigade, general of division, and general-in-chief!

In another branch of his military administration, Carnot, as our author shews, was no less great and successful. Copper was required for his cannon, and saltpetre for his gunpowder, and leather for the shoes and accoutrements of the soldier, and muskets for the destruction of his enemies. The bells of the church and of the convent, which had peacefully summoned the worshipper to prayer, became the cartilage of those brazen throats that were to utter the thunders of desolation and death. The soil of France, never before appealed to for the elements of destruction, surrendered to the analyst the last atom of its nitre; and while new discoveries in chemistry gave rapidity to the process of the tanner, new inventions and new methods added fresh skill and unexampled rapidity to the hand and labours of the armourer. The balloon, hitherto used to gratify the multitude, became, in 1799, an instrument of war. From the region of clouds General Morlot studied the manœuvres of the enemy at the battle of Fleurus, and was thus enabled to obtain for his country a brilliant triumph. The telegraph, too, which had

been profitless for centuries, was perfected for the service of the Committee of Public Safety,—transmitted their orders in a few minutes, and enabled them to follow the movements of their armies, as if they had deliberated in the midst of them. Thus did science and patriotism combine their irresistible powers to smite an enemy and to save an empire. The annals of nations, struggling for their existence, present us with but few examples in which science has been summoned to their defence, and acquitted itself of the task. When the scientific arts were in their infancy, they had but little to offer for the service of the State, and even that little the State did not deserve. But in the present age, when the firmament of civilisation shines with its constellations of genius, and when new elements of matter and new combinations of mind have given an almost superhuman character to the works of man, we may look forward to the time when a small but intellectual State may defy the most powerful empire, and when a handful of instructed warriors may drive from their shores the hordes of barbarism and ignorance that may assail them. Writing under the second dynasty of the Bourbons, M. Arago has said that the art of thus exciting genius and forcing it from its accustomed repose, has been lost. True as this remark is, it is not applicable to England. The art of exciting genius has never penetrated the chain of shops and customhouses which girdle our commercial island, and there has never been a statesman who was willing to import it. Times, however, of national danger are not impossible. Continental hosts may surround us with their navies of steam, and stop the corn and the wine on which we live, and the flax and the cotton with which we work, while an internal foe, the enemy of religious truth and religious liberty, is ready to rebel and to betray. Science may then be required when it is scarcely in existence, or may be summoned when it refuses to appear. Like the invisible domestic which quits the house when its services are undervalued, science may have found a home in a foreign land when she was no longer wanted in her own.

While Carnot was thus occupied in relieving the more immediate necessities of the State, he did not forget his obligation to the men of science who had so nobly assisted him. Among the great establishments which he contributed to found, were the First Normal School, the Polytechnic School, the Museum of Natural History, the Conservatory of Arts and Professions; and among those which he encouraged by his vote, were the mensuration of the earth, the establishment of a new system of weights and measures, and what M. Arago calls the great and incomparable registers of the national property.

But though a colossal mass of physical power—of men and of the munitions of war, was thus placed by the Convention in the

hands of Carnot, yet it was left to him to organize, to discipline, and to instruct the Requisition.*

"Carnot," says M. Arago, "organized *fourteen* armies. He required to create qualified officers, and he was of the opinion of a certain Athenian general, *that an army of deer commanded by a lion was better than an army of lions commanded by a deer*. He selected them from the inexhaustible mine of non-commissioned officers; and, as I have already said, his penetrating eye searched the obscurest ranks for talents and courage combined, and promoted it rapidly to the highest grade. Like the Atlas of fable, he bore for several years the weight of all the military events in Europe. He wrote with his own hand to the generals;—he gave them detailed orders, in which every contingency was minutely foreseen;—his plans, such as those which he addressed to Pichegru on the 21st Ventose, of the year II., seemed the result of real divination. The facts justified to such a degree the predictions of our colleague, that in order to write the history of the memorable campaign of 1796, we have only to change the proper names of a few villages in the instructions which he addressed to the general-in-chief. The places where they were to give battle,—those where they were to limit themselves to simple demonstrations and skirmishes,—the strength of each garrison, and of each post,—everything was pointed out, and everything regulated with admirable precision. It was by the orders of Carnot that Hoche one day concealed his movements from the Prussian army, crossed the Vosges, and joining the army of the Rhine, struck a decisive blow upon Wurmser, which led to the deliverance of Alsace. In 1793, when the enemy expected, in conformity with the classic precepts of strategy, to see our troops march from the Moselle to the Rhine, while they collected on the latter river a formidable force to resist them, Carnot, heedless of old theories, detached suddenly 40,000 men of the army of the Moselle, and sent them by forced marches to the Meuse. Such was the celebrated manœuvre which decided the success of the campaign of 1793, during which the Austrian and Dutch generals had the double mortification of being constantly beaten, and of being beaten contrary to rule. Yes, gentlemen, the National Tribune was no more than just when it re-echoed these glorious words, now become historical,—*Carnot has organized victory.*"†—*Biographie, &c.*, pp. 49, 50.

One of the most interesting displays of Carnot as a soldier, was made on the field of battle at Wattignies. The Prince of Cobourg, at the head of 60,000 men, occupied all the outlets of the forest of Mormale, and blockaded Maubeuge, the retention of which was the only obstacle to the advance of the Austrians

* By the Requisition all unmarried persons, from 18 to 25, were ordered to join the armies.

† "Décrétez vous," said Bourdon de L'Oise, "d'accusation l'homme qui a organisé la victoire."

to Paris. Though with inferior numbers, Carnot recommended an attack on the apparently impregnable position of the enemy. General Jourdan hesitated before so terrible a responsibility. Carnot hastens to the army, and attacks the enemy; but their numbers are so great, and their entrenchments so strong, and their artillery so formidable, that the day closes without any decided advantage to either of the armies. The left wing, which had lost ground and some cannon, in place of being reinforced, was almost wholly carried to the right, and in the morning Cobourg found himself in the front of, as it were, another army. The battle again raged, and the Austrians enclosed in their redoubts, and protected by woods, coppices, and hedges, valiantly resisted the attack, and repulsed one of the French columns of attack which began to run away. Carnot, in agony at the disorder, rallied the soldiers, formed them anew on the plain,—cashiered, in the sight of the whole army, the general who had allowed himself to be beaten by disobeying his orders, and seizing the musket of a grenadier, he marched at the head of the columns in the costume of a Representative of the People. The Austrian cavalry were repulsed by the bayonet. Carnot forced his way into the village over heaps of the slain, and from that moment the blockade of Maubeuge was raised.* This was but the second time that Carnot had heard in battle the sound either of musketry or cannon: he had on a former occasion, with the musket in his hand, carried by assault the town of Furnes, when it was occupied by the English. The campaign of seventeen months, conducted by Carnot, and during which the troops of the Republic never laid down their arms, was one of the most successful and glorious that France can boast. According to the report of Carnot, they gained 27 victories, eight of which were in order of battle, 120 combats of inferior importance, 80,000 enemies killed, 91,000 prisoners, 116 fortified places or important cities taken, of which 36 were after being besieged or blockaded, 230 forts or redoubts carried, 3800 cannons and mortars, 70,000 muskets, 1400 milliers of powder, and 90 standards.

Soon after the Parisian sections had risen against the Convention, Carnot quitted the Committee of Public Safety, and from that moment victory almost everywhere abandoned the Republican standard. Reverses followed in rapid succession, the springs of action were unbent, and distrust and despair seized every mind. From such a result, as M. Arago remarks, better than

* According to a German historian, the Prince of Cobourg, when he saw the French columns giving way, exclaimed to his troops, "The Republicans are excellent soldiers; but if they dislodge me from this position, I will consent to be a Republican myself."

from an interrupted series of victories, we may learn *how great an influence the genius of a single man exercises over the destiny of nations*. Nor was the nation insensible to the obligations which it owed to Carnot. He was called to the legislature, which replaced the National Convention, by *fourteen* departments; and soon after his admission into the Council of Ancients, Carnot, on the refusal of the Abbé Sieyes, became one of the five members of the Executive Directory.

Carnot was now a second time called to the direction of the armies, when the Republic was again on the brink of a precipice. The public treasury was empty. The Directory, believed to be insolvent, could scarcely procure clerks and servants. Couriers were delayed for want of money to pay their expenses, and generals themselves did not receive more than *eight francs* per month in coin, as a supplement to their pay in assignats. Farmers declined to supply the markets with provisions, and manufacturers refused to sell their goods, because they would have been compelled to take payment in paper money, of no value. Throughout France, too, famine prevailed with its usual attendants of discontent and riot. The army was without clothes and shoes—without the means of transport—without the munitions of war. Pichegru carried on a plot with the Prince of Condé, compromised the army of Jourdan, evacuated Manheim, raised the siege of Mayence, and delivered the frontier of the Rhine to the Austrians. Civil war was lighted up in La Vendée, the English threatened the coasts, and on the frontier of the Alps, Schérer and Kellermann carried on a disadvantageous war of defence against the Austrian and Italian troops.

Under such circumstances Carnot again accepted the high trust which he had in times equally trying so nobly discharged. Conscious of the difficulties which surrounded him, he warned his colleagues that the destinies of the State hung on the personal character of five men, and that the nation might suffer from differences in their views; and satisfied with having recorded his apprehensions, he submitted without a murmur, when the Directory had been legally established. Adopting from Carnot a new system of operations for pacifying La Vendée, Hoche triumphed over Charette, and in eight months brought to a close the civil war, which had so long desolated the country. On the Rhine Jourdan and Moreau carried their victorious arms into the very heart of Germany; and Bonaparte, who at the age of twenty-five got the command of the army of Italy, with the co-operation of Masséna, Augereau, Lannes, and Murat, annihilated in a few months three Austrian armies. The plan of this campaign, glorious to France, was given by Carnot; and M. Arago has cited a letter from Bonaparte, desiring to learn his

intentions for the guidance of the army of Italy, and he has given us the following characteristic letter from Carnot to Bonaparte, dated the 21st May 1796. "Attack Beaulieu before his reinforcements can join him; do not on any account neglect to prevent this junction; you must not weaken yourself before him, and especially you must not, by a disastrous separation of your troops, give him the means of fighting you in detail, and recovering the territory he has lost. . . . After the defeat of Beaulieu, you may make an expedition to Leghorn. The intention of the Directory is, that the army should not pass the Tyrol till after the expedition to the south of Italy."

In concluding this notice of the correspondence between Carnot and Bonaparte during this celebrated campaign, M. Arago justly reminds his colleagues of the noble instructions which were given to the French general, to honour and protect the distinguished artists and *savants* whom the fortunes of war might subject to his power. On the 13th June 1796, Carnot wrote the following letter to Bonaparte,—a letter which will never be forgotten in the annals of civilisation or of war:—"General, in recommending to you in our letter of the 26th Floréal, to receive and to visit the famous artists of the countries in which you find yourself, we have particularly pointed out to you the celebrated astronomer, Oriani of Milan, as deserving to be protected and honoured by the Republican troops. The Directory will learn with satisfaction that you have fulfilled its intentions with respect to this distinguished *savant*; and it invites you, in consequence, to give an account of what you have done to shew to the citizen Oriani those marks of interest and esteem which the French have always had for him, and to prove to him that they know how to unite to the love of glory and of liberty, that of genius and the arts."

Although Carnot had, at the call of his country, quitted the peaceful pursuits of science, and taken his place in the battlefield, and in the wild arena of political strife, yet he never forgot the science which he so much loved. Amid the dangers of war, and the distractions of the Tribune, his mind was often turned to the subject of the higher analysis, and he published in 1799, his celebrated work entitled, "*Reflections on the Metaphysics of the Infinitesimal Calculus*." Had these noble "Reflections" been the transition studies, during which Carnot was marking his return from the stormy discussions of the Directory to his peaceful duties in the Institute, or the engrossing pursuits by which he was weaning himself from the excitements of a political life, science would not have had to mourn over the misfortunes of one of her most distinguished sons, nor humanity to deplore the baseness of enemies, and the ingratitude of

friends. Carnot did not quit the Directory when its existence was threatened by a powerful combination of its enemies. The foreign affairs of the nation presented the most favourable aspect. Bonaparte had signed at Leoben the preliminaries of a treaty of peace. He had pointedly refused to insert in the protocols, the name of the Emperor of Germany before that of the French Republic; and when foreign generals talked to him of its recognition, he replied in these memorable words:—"The French Republic does not wish to be recognised: it is in Europe what the Sun is in the horizon; and so much the worse for those who do not wish to see it, and to profit by it." Under these circumstances, Carnot believed in the possibility of conciliating the parties which divided the State, and he refused to escape from danger by overstepping the limits of the constitution. This illusion, however, was speedily dispelled by the events of the 4th September 1797. Violent addresses had been sent by the army of Italy against the party of the Clichians to which he belonged, and Augereau, the lieutenant of Bonaparte, had been commissioned to assist in the revolution. Ignorant of what had passed in Italy, Carnot had so little foreseen what was to happen, that he was surprised in his bed by the officers of Barras, and had scarcely time to save himself by escaping through the garden door of the Luxembourg. A family of artisans from Burgundy, received and placed him in concealment. "He then took refuge in the house of M. Oudot, a great partisan of the Coup d'Etat of the 4th September, and where, of course, nobody thought of seeking for the proscribed Director." He was condemned to banishment on that very day, along with his colleague Barthelemy, and all the chiefs of the Clichian party; and, before he quitted Paris, his name was erased from the list of the members of the National Institute, to the creation of which he had so effectually contributed.

The ordonnances which were issued on the 5th and 6th of September 1797, declared vacant all the offices which were held by the citizens who had been proscribed on the 4th. Letourneux, the Minister of the Interior, enjoined the Institute to fill up the place of Carnot, and Bonaparte was unanimously elected by a hundred and four members, in whom the right was vested. "I have often," says M. Arago, "felt a just sentiment of pride, on seeing the admirable proclamations of the army of the east signed, MEMBER OF THE INSTITUTE, *General-in-Chief*; but a sadness of heart followed this first emotion, when the thought returned that the *Member of the Institute* was adorned with a title which had been torn from his first protector and friend!"

Concealed in the house of a political enemy, M. Oudot, whose name ought to be cherished by every friend of humanity, Carnot

had the good fortune to find another noble-minded citizen, who took him from his hiding-place, and conducted him in a post-chaise to Geneva. Here he lodged with a bleacher of the name of Jacob; but, though prudence required that he should remain in concealment, his desire to have correct intelligence respecting the country which he loved, induced him to quit the house, when he was immediately recognised by the spies of the Directory. The accredited agent of France lost no time in demanding from the Genevese Government the person of Carnot; but the magistrate to whom the application was first made was fortunately a man of honour and conscience, and felt all the degradation which such an act would bring upon his country. The name of the magistrate was Didier, a name honourably known in the republic of letters. M. Didier lost no time in writing to Carnot. He warned him of his danger,—implored him immediately to leave his lodgings, and indicated to him the part of the Lake of Geneva where he would find a boatman to carry him to Nyon.

“It was now very late. The officers of the Directory were watching for their prey. Our colleague went straight to his host, and without any preamble asked his pardon for having introduced himself into his house under an assumed name. ‘I am,’ added he, ‘a proscribed individual,—I am Carnot. They are about to arrest me: my fate is in your hands: will you save me?’ ‘Without doubt,’ replied the honest bleacher. He immediately dressed Carnot in a blouse, with a cotton bonnet and a basket, and he placed upon his head a large packet of dirty linen, which hung down even to the shoulders of the pretended Jacob, and covered his figure. It was by means of such a disguise that the man from whom a few lines would have been sufficient to move or stop in their march the armies commanded by the Massenas, the Hoches, the Moreaus, and the Bonapartes,—to excite hope or fear at Naples, Rome, or Vienna,—it was as a servant in a washing establishment that Carnot reached safe and sound the small boat which was to enable him to escape from transportation. In this boat a new and strange emotion awaited Carnot. In the boatman he recognised the same Pichegru whose culpable intrigues had rendered the event of the 4th September almost inevitable. During the passage across the lake, not a single word was exchanged between the two exiles. The time, the place, and the circumstances were not suitable for political debates or mutual recriminations. Carnot had soon reason to felicitate himself on his reserve. While reading the French journals at Nyon, he found that he had been deceived by an accidental resemblance, and that the companion of his voyage, so far from being a general, had never made any other manœuvre than that of his frail bark; and that Pichegru, arrested by Augereau, awaited his transportation in one of the prisons in Paris. Carnot was still at Nyon when Bonaparte, returning from Italy, passed through this town on his way to Rastadt. Like all the other inhabitants he illu-

minated his windows in order to do homage to the General."—*Biographie, &c.*, pp. 75, 76.

For the space of two years Carnot resided at Augsburg under an assumed name, exclusively occupied with the cultivation of science and literature, but he was again destined to be recalled to power when his country was in danger. When Bonaparte, on the 9th November (18th Brumaire,) upon his return from Egypt, overturned the constitution of 1795, which had never taken root in the affections of the people, one of his first acts was to recall the illustrious exile, replace him in the Institute, and appoint him Minister of War. On the refusal of the British Minister to negotiate a peace—an act which Europe and humanity have had so much reason to deplore, Bonaparte rallied under Carnot the heroism of the nation, and by the glorious victories of Marengo and Hohenlinden secured the independence of France. Although it was in the power of Bonaparte to have established order and liberty upon an impregnable basis, yet the ambitious soldier had very different objects in view. These objects were soon discovered by Carnot and the friends of the Republic, and very sharp disputes arose almost daily between the First Consul and the Minister of War. Carnot mourned over the changes in the constitution which he saw in preparation, and resolved not to be a party to them. He resigned office on the 16th Vendémiaire 1801, in the following words, "Citizen Consuls, I send you again my demission; have the goodness not to delay accepting it."

In 1802 Carnot was again called into public life as a member of the Tribunal. In this new position he embraced every opportunity of opposing the downward tendency to absolute power. He used all his influence against the establishment of a Consulate for life. He opposed the creation of the Legion of Honour as an Institution not for rewarding merit, but for creating political subserviency; and when it was proposed to raise Bonaparte to the Imperial Throne, he resisted every attempt to seduce him; and "though surrounded," as M. Arago observes, "with old Jacobins, and even with those who persecuted him as a Royalist on the 18th Fructidor, he stood almost alone in the midst of the general defection, as if it were to shew to the world that a political conscience is not an empty name, but a reality."*

The Tribunal did not long survive the overthrow of the Republic, and Carnot, again freed from the trammels of office, returned to his country house near Estampes, and resumed his

* His speech at the Tribunal on this subject was delivered on the 1st of May 1804. It went through several editions, and was hawked through the streets of Paris for four days.

mathematical studies. He soon after this published his able work, "*The Geometry of Position*,"* in which he has described, for the first time, many new properties of space, evincing the power and the fertility of the original methods which he has presented to science.

In the year 1809, Bonaparte was greatly annoyed at the slight resistance which several fortified towns had opposed to the besiegers, and about the end of that year he requested Carnot to draw up a system of special Instructions for the guidance of the Governors of such places. Carnot entered with zeal on the discharge of this duty, and in the course of FOUR months he produced his celebrated work, entitled, *Traité de la Défense des Places Fortes*, in which he gives an account of an entirely new method of defending fortified places. Vauban had estimated the duration of the siege of a place well fortified and garrisoned at forty-eight days. Carnot considers this as the extreme duration, and is of opinion that it seldom exceeds twenty-two or twenty-three days, fourteen being generally spent in constructing the approaches, and eight or nine days in the assault. The principle of the new method of defence which he proposes, is to substitute vertical fires for direct or horizontal fires. He forms the enceinte of the place of a simple wall not very thick, with an escarpe and counterscarpe; and behind the wall he places mortars of different calibres directed at an angle of 45° behind the parapet, and covered by blindages. They are charged to carry the shot to such a height as to kill the person upon whom they fall. These fires are supposed to commence when the enemy opens his third parallel, and to continue for ten days; assuming that the field occupied by the besieging army is 60,000 square yards, that the garrison is 4000, and that 3000 are spread over this area, forming the avenues of the place, one man occupying twenty square yards. But a man's body in a horizontal projection covers about a square foot, consequently the space covered by the troops and workmen of the besiegers is the 180th part of the whole area, and out of 180 shots falling on that space one will strike the enemy. M. Carnot is of opinion that one ball in fifty would take effect, owing to the shot not falling vertically, but at such an angle that the inclined projection of a man's body is nearly double its horizontal projection; but to remove every objection, he supposes only one ball in 180 to take effect. He now supposes that six 12-inch mortars mounted on the attacked front, the shells of which weigh 150 pounds, will each discharge 600 balls, 1-4th of a pound weight, at a single shot, or 3600 from the six.

* *Géométrie de Position, à l'usage de ceux qui se destinent à mesurer des terrains.*
4to. Paris, 1803.

But one ball out of 180 will take effect; therefore at each discharge of the six mortars twenty of the besiegers will be killed or disabled. Giving a quarter of an hour to each round, he finds that 100 rounds may be fired in twenty-four hours, and hence 2000 men will be destroyed or disabled. During the ten days, therefore, that the attack continues, the besieging army will sustain a loss of 20,000 men: But if the garrison consists of 4000 men, the whole of the besieging army will probably not exceed 20,000, that is, the besieging army will be completely destroyed before effecting a breach. From these views and calculations Carnot concludes that no fortified place thus defended can be taken by any known method of attack. Economy both in men and money he considers as a powerful recommendation of it; a few companies of artillerymen being alone required, while the great body of the garrison are employed in watching the proper time for making a sortie, and compelling the besiegers to keep a strong guard upon their works.

During Carnot's retirement from active military duties, between 1807 and 1814, he devoted himself to the discharge of the important functions of a Member of the Institute, a title which was restored to him at the death of M. Le Roy. Almost all the Memoirs on Mechanics, submitted to the judgment of the First Class of the Institute, were sent to him for examination; and M. Arago informs us that his singular sagacity enabled him to point out the new and important parts of them with remarkable clearness and precision; and from his habit of doubting and distrusting theoretical results, to give most important advice and assistance to the authors themselves.

From these peaceful pursuits, for which he was so well qualified, and which he had every reason to hope would occupy the evening of his life, Carnot was again called into the arena of political and military strife. He could not now afford to subscribe to the public journals. Every day at the same hour he went to the library of the Institute, and read with the deepest interest the exciting news of the advance of the allied troops. On the 24th January he appeared more than usually engrossed with them. He asked for paper, and wrote the following remarkable letter addressed to Napoleon.

“SIRE,—While success crowned your enterprises, I abstained from offering to your Majesty services which might not be agreeable to you. Now that a reverse of fortune puts your firmness to a severe test, I do not scruple to offer you the feeble means which I still possess. It is little, doubtless, that a sexagenarian arm can offer; but I conceived that the example of a soldier whose patriotic sentiments are known, might rally round your Eagles many of those who are hesitating what

side to take, and who might allow themselves to be persuaded that they would serve their country by abandoning them. It is still time for you, Sire, to conquer a glorious peace, and to obtain the love of a great people."

Napoleon did not hesitate to accept so noble an offer, and he immediately appointed Carnot Governor of Antwerp, a place to which he attached great importance, and which was at this time surrounded with his enemies. Without having seen the Emperor, Carnot set out from Paris about the end of January, and reached Antwerp on the morning of the 2d February, only through the bivouacs of the enemy. The bombardment of the French Squadron by the English began next morning. It lasted during the 3d and 4th, and part of the 6th of February, when, after throwing 1500 bombs, 800 ordinary shot, and many red-hot shot and fuses, the English retreated.

When some additional troops were required for the campaign in Belgium, Napoleon thought of drawing them from the garrison of Antwerp. Carnot immediately wrote the following despatch to the General-in-Chief, Maison, dated the 27th March:—

"In obeying the orders of the Emperor, I am obliged to declare to you, General, that these orders are equivalent to surrendering Antwerp. The enceinte of this place is immense; and it would require at least 15,000 good troops to defend it. Then how could his Majesty believe that with 3000 sailors, most of whom never saw fire, I could hold the place of Antwerp, and the eight forts which depend upon it?

"Nothing, then, remains for me to do but to disgrace myself or to die. I beg you will believe that we have all decided upon the last alternative.

"I believe, General, that if you could take it upon you to leave me at least a troop of the line and of artillery, (there was at Antwerp a detachment of the Imperial Guard,) you would do a great service to his Majesty; but the whole will be ready to set out to-morrow, if I do not receive from you counter-orders, which I look for with the greatest impatience and the greatest anxiety."

He at the same time wrote as follows to the Duke de Feltre, who was then Minister of War.

"When I offered my services to his Majesty, I was ready to sacrifice my life, but not my honour. You know that I am not in the habit of concealing the truth, because I do not seek for favours. The truth is, that the state to which your orders reduce me is an hundred times worse than death, because it is only through the cowardice of the enemy that I have any chance of maintaining the post which is confided to me."

When Bernadotte wished to turn Carnot from the line of con-

duct which he had marked out for himself, he received the following answer:—"Prince, It is in the name of the French Government that I command in the place of Antwerp. It alone has the right to fix the term of my functions. The moment that the Government is definitively and incontestably established on a new basis, I will instantly execute its orders. This resolution cannot fail to meet with the approbation of a French born Prince, of one who knows so well what the laws of honour prescribe."

After the entrance of the allies into Paris, and the constitution of a Provisional Government, M. Dupont, the Minister of War, sent one of his Aides-de-Camp to Antwerp. The following is the answer which Carnot returned on this occasion, dated 15th April 1814:—

"I must say, M. le Comte, that the mission of an Aide-de-Camp with a white cockade is a calamity. Some are desirous of declaring themselves immediately, while others have sworn to defend Bonaparte. A sanguinary struggle in the very fort of Antwerp would have been the immediate consequence, if I had not resolved, with the advice of my council, to delay my adhesion and that of the whole armed force. You desire, then, a civil war. You insist that the enemy should be master of all our strongholds; and because the city of Paris has been forced to receive the law of a conqueror, is it necessary that all France should receive it? It is obvious that the Provisional Government can transmit only the orders of the Emperor of Russia. Who will absolve us if we obey such orders? What! will you not permit us to save our honour? You become yourself the promoter of desertion, the provoker of the most monstrous anarchy. The lessons of 1792 and 1793 are lost upon the new rulers of the State. They try to surprise us into adhesion, by affirming that Napoleon is about to abdicate—and to-day they tell us the very reverse. After having given us a tyrant in place of anarchy, they give us anarchy in place of a tyrant. When shall we see the end of these cruel oscillations? Paris enjoys but a temporary calm—a perfidious calm, which forebodes the most dreadful tempest. O what days of affliction and grief! happy are they who have not seen them."—*Biographie, &c.*, pp. 99, 100.

After Carnot had received orders from the Bourbon Government, and was about to set out for Paris, the authorities and inhabitants of one of the fauxbourgs of Antwerp, the destruction of which had been resolved upon, but which he thought it possible to preserve, without interfering with the defence of the place, addressed to him the following letter:—

"You are about to leave us, which is a source of great distress: we would fain keep you a few minutes longer. The inhabitants of St. Willebrord and of Borgerhout request that the

person who shall be charged with the administration of their affairs shall be permitted to inquire once a-year for the health of General Carnot. We shall probably never see you again. If General Carnot should at any time have his portrait taken, and would condescend to have a copy of it taken for us, this precious gift would be deposited in the Church of Willebrord."

With these striking illustrations of the fidelity of Carnot to the cause of his imperial master, it is not difficult to anticipate the part which he must have taken during the Hundred Days. Having given in his adhesion to the Government of the Bourbons, he was received at court by the King and the princes, but with a degree of coldness inconsistent with the royal declaration, that the past was to be forgotten, and that men of all opinions were in future to be united in the service of the country. Carnot was deeply mortified at this ungenerous reception, and was induced to write a very strong article against the Restoration under the title of *Mémoire au Roi*. This memoir got into the possession of some of his friends, who appear to have published it without his authority; and such was the extent of its circulation, and the avidity with which it was read, that it paved the way for the Revolution of the 20th of March 1815.

No sooner had Napoleon returned to the Tuileries than he recalled Carnot to his councils, and persuaded him that he would change his system of government, renounce his former views of conquest and absolute monarchy, and govern the country upon liberal and even republican principles. He therefore willingly accepted the portfolio of Minister of the Interior, with the title of Count and Peer of France, and devoted himself with a liberal spirit to the onerous duties of his office. He strove to give greater latitude to the liberty of the press, and to arm and multiply the national guards; and such was his enthusiasm that he wrote to Napoleon that "the 20th of March ought to make us remount without a pause to the 14th of July."

After the proclamation of the famous Additional Act, Carnot proposed in a letter to Napoleon two projects of decrees, which, as M. Villeneuve remarks, prove more than anything else how little he understood the character of the man to whom he thus wrote :—

"SIRE,—Have the kindness to believe a man who has never deceived you, and who is sincerely attached to you. The country is in danger; discontent is general; commotion is increasing hourly in the departments, as well as in Paris; civil war is ready to break out in several parts of France. I propose to your Majesty two projects which I consider necessary to restore tranquillity, and to bring back to you the mass of the citizens. They must issue *proprio motu*, and not on the report of any Minister, or in consequence of the deliber-

ation of any Council of State. It would be desirable to have them published in the course of the day.—I am, &c., CARNOT."

The following is the minute of the two projects of decrees referred to in the preceding letter :—

1. "NAPOLÉON, *Emperor of the French*. It being our intention to allow no trace of feudality to exist, we have decreed and decree as follows : From the date of the publication of the present decree, the denomination of *subject* and *lord* shall cease to be used among the French."

2. "NAPOLÉON, *Emperor of the French*. Having learned through the liberty of the press, that it is the wish of the people of France to have improvements made in the Constitutional Act prepared for its acceptance, we have decreed and decree as follows :—

"Art. 1. The Chamber of Representatives shall, in the course of next session, decide on the modifications of which the Constitutional Act is susceptible for its improvement.

"Art. 2. The new Act shall be submitted to the people for their acceptance in the Primary Assemblies."

These projects did not obtain the approbation of the Emperor, who chose to prefer absolute power to the constitutional government of a free people. Carnot, however, continued in the faithful discharge of his duties ; and after Bonaparte had left Paris, on the 12th of June 1815, for the head-quarters of his army at Beaumont, the Home Minister gave the most energetic support to his master, more it is supposed from a dread of the return of the Bourbons, than from any attachment to his person and character. In the extraordinary position in which Carnot was now placed, it is scarcely to be wondered at, that, as a member of the Provisional Government, and under the influence of such a man as Fouché, Duke of Otranto, he should have given his adhesion to measures characterized by great weakness, and which every patriot would wish to throw into obscurity. When Napoleon retained in his councils such a man as Fouché, in spite of the most palpable evidences of his treason, we need not be surprised, as M. Arago has observed, that Carnot was fascinated by his intrigues.

Among the charges against Carnot which have been urged by his enemies, is that of having accepted the title of Count of the Empire. M. Arago has given us the following interesting and satisfactory explanation, if any were wanted, of this part of his conduct. The following statement was communicated to M. Arago on the very day on which the event which it records took place :—

"When I was at dinner with the Minister of the Interior (Carnot),

a letter arrived. The Minister broke the seal, and immediately exclaimed—‘ Well, gentlemen, here I am, a *Count of the Empire!* I have a strong suspicion of the quarter from which the blow comes. It is my resignation that is wanted—that is required. I will not give *him* this satisfaction. I will remain, as I believe it is in my power to be useful to the country. The day, I hope, will come when I shall be permitted to explain myself distinctly respecting this act of perfidy. At present I will content myself with disdaining this vain title, and with never adding it to my name; and especially, that I will never take the diploma of it, however urgently it may be pressed upon me. From this moment, gentlemen, you may reckon it certain that Carnot will not long continue Minister, after the enemy has been repulsed.’—*Biographie, &c.*, pp. 101, 102.

The battle of Waterloo and its results prevented the fulfilment of this prediction. It fell to the lot of Carnot to communicate the disastrous intelligence to the Chamber of Peers, and on this occasion he had a sharp altercation with Marshal Ney, in which was remarked the singular contrast between the despair of a warrior who had been called the *bravest of the brave*, and the calm firmness and true courage of the stern member of the Convention. Amid the general consternation which the advance of the allies produced, Carnot never despaired. He exerted himself in providing for the public safety, and persuaded that even in such a crisis the valour of Napoleon would save the country, he, who as a tribune had dared to vote against the elevation of Bonaparte to the imperial throne, now vigorously opposed himself to his abdication. When this event took place in 1815, Carnot, hiding his face in his hands, shed tears over his last hope of liberty. He consented, however, to be one of the five members of the provisional Commission of Government, which exercised almost no other function than to sign the capitulation of Paris, and send the wreck of the army behind the Loire.

After having made several ineffectual attempts to obtain for Napoleon the command of the troops, Carnot did everything that he could to hasten his departure, and to induce him to retire to the United States; and immediately after the return of the king he himself retired once more to that home of virtue and of science which he had so often quitted for the defence of his country. Here, however, he was not permitted to remain. His devotion to one sovereign excited the enmity of another, and that branded dynasty which neither prosperity nor adversity could teach, paved the way for their own proscription, by proscribing the noblest of their subjects. Carnot was ordered to repair under surveillance to Blois, as inscribed in the list of proscriptions prepared, on the 24th July 1815, by his colleague the Duke of Otranto; and his was the only name of all the ministers

of the hundred days with which that list was honoured. "If this exceptional severity," as M. Arago remarks, "was the consequence of that ardent patriotism under which our colleague disputed with foreigners the last inch of the territory of France, or of his persisting, unhappily without success, in pointing out to the Emperor the traitor who had under an old reputation for talent been introduced into the ministry, the glory of Carnot will not have been sullied." But though a prince of the house of Bourbon had no feeling for the representative of genius, of patriotism, and of virtue, who saw it to be his duty to defend his country whoever was its king,—there was another prince, and one of a higher degree, and a nobler nature, whose heart could be softened by the misfortunes of a hero and a statesman, whom the casualties of war had overtaken. The Emperor Alexander, commiserating the lot of his noble enemy, had made several representations in his favour to the royal government, and when he found them fruitless, he had provided for him even before his arrestment on the night of the 24th July, a passport for the Russian states! Carnot went first to Germany, and though travelling under a false name, he did not renounce the title of a Frenchman till he crossed, anew and with much grief, that noble river to which he had the signal honour to extend the frontier of his country. From Germany he repaired to Warsaw, where he was received with much kindness by the Archduke Constantine. The brave Polish patriots, so often crushed under the tread of the despot, and themselves, so frequently the objects of hospitality, were, as might have been expected, the readiest to dispense it. Carnot's arrival among them was hailed with demonstrations of sympathy, which the depths of the heart only can dictate. General Krasinski gave him the title of a Majorat in lands with a rent of 8000 francs, which he held of Napoleon. The Count de Paç wished him to accept the use of several domains; and though Carnot was not a freemason, all the masonic lodges of the kingdom raised a subscription which produced a very considerable sum; but of all these offers, which he refused, the one which sunk deepest in the heart of Carnot, was that of a Frenchman, who himself poor, and established for several years at Warsaw, went one morning and offered him in a purse the fruit of the savings of his whole life!

A dislike of the climate of Poland, combined with a desire to be nearer his native country, induced Carnot to accept of the kind offers of the Prussian Government, and to establish himself at Magdeburg, where he spent the last years of his life in study, in meditation, and in the company of one of his sons, whose education he superintended. "It was," says M. Arago, "a fine sight to see the whole of Europe,—to see especially its most absolute sovereigns compelled, to a certain degree, to render

homage to that which was great and noble and striking in the French Revolution,—even in the person of one of the judges of Louis XVI.—even in the person of one of the Committee of Public Safety.” Even Napoleon was obliged to confess the greatness of his services, and the grandeur of his character, when in these memorable words he addressed him after the battle of Waterloo — “*Carnot, I have been too late in knowing you.*”^{*} Dumouriez remarked of Carnot that he was an austere philosopher, a perfect citizen, and a great man; and he added that Carnot was the creator of the new military art in France, which he (Dumouriez) had only had time to sketch, but which Bonaparte had brought to perfection. Carnot died at Magdeburg the 2d of August 1823, at the age of seventy, and was buried in the Church of St. John.

Carnot was in his person considerably above the middle size, with regular and masculine features, a large and serene forehead, and sharp and penetrating blue eyes. His manner was polished but circumspect and cold, and at the age of sixty, even in the costume of a civilian, one could perceive somewhat of the military air to which in his youth he had been accustomed.

After having viewed Carnot in all his positions as a member of the Convention, of the Committee of Public Safety, and of the Directory, and as a Minister of War, a military engineer, an academician, and an exile, M. Arago proceeds to give some interesting anecdotes of him as a private individual, which, while they present him to our admiration as a noble example of disinterestedness and patriotism, so rare among public men, may afford to the rulers of nations lessons of deep importance to society as well as to themselves.

In reply to the charge of being ambitious, which was made against Carnot, M. Arago reminds us that the man who in 1793 organized *fourteen* armies, arranged all their movements, nominated and replaced generals, and even cashiered them, as at Wattignies, on the field of battle and under the cannon of the enemy—was but a simple Captain of Engineers; and even when, as one of the Directory, he was the supreme arbiter of the operations of the armies, sending Hoche to La Vendée, Jourdan to the Meuse, Moreau to the Rhine in place of Pichegru; and, by a happier inspiration still, confiding to Bonaparte the command of the army of Italy, he had become Major of Brigade by seni-

^{*} In the *Memoirs of Montholon*, Napoleon is made to say, what he probably never said, and what, if he did say, is not true, “that Carnot had no experience in war; that his ideas were false on every branch of the military art, even in the attack and defence of places, and on the principles of fortification which he had studied all his life; and that he has published works on these subjects which could be avowed only by a man who had no practice in war.”—Tom. iii. p. 124.

ority, a step which he kept till the 18th Fructidor drove him from France. Even when, in 1801, his successor in the War Office placed his name in the list of officers who were to be named Generals of Division of the French army, the *Consuls* refused to listen to the most earnest appeal to them from their new Minister of War, and Carnot remained in his former humble position.

But justice often comes at last, even when personal danger wrests it from the unjust. In 1814, when Carnot had to be appointed Governor of Antwerp, to sustain the desperate cause of an ungrateful master, the clerk was astonished to find that the man who was to be placed at the head of a crowd of old Generals was only a Major of Brigade; and having represented the case in the proper quarter, Carnot, "in imitation of a certain ecclesiastical personage, who in the same day received the lesser orders, the greater orders, the office of Priest and the rank of Bishop,—passed in a few minutes through the steps of Lieut.-Colonel, Colonel, General of Brigade, and General of Division."—"Yes," adds M. Arago, "Carnot had ambition," but as he himself said, "it was the ambition of the Spartans to defend the pass of Thermopylæ." It was not likely that a character such as this would be stained by a love of money, or by habits of ostentatious and luxurious living. When Carnot returned into private life, his small patrimony was untouched; and hence, as M. Arago remarks, it might have been expected from his simple habits and his antipathy to show, that if he did accumulate wealth, he might have obtained that independence which was enjoyed by those who, like himself, had held lucrative appointments.

When Carnot became Minister of War, after the 18th Brumaire, the pay of the troops, and even that of the clerks in the War-office, was *fifteen* months in arrear. Before a few weeks had elapsed, everything was paid but the salary and allowances of the Minister himself. The *Epingles* (pin-money,) the name given to those *douceurs* which were levied under old contracts, both public and private, were not likely to pass into the treasury of Carnot. A horse-dealer with whom he had large transactions, brought him 50,000 francs as the sum due to him under this name. Having served his official apprenticeship in the Committee of Public Safety, where contractors durst not speak of *douceurs*, Carnot did not at first comprehend the nature of the liberality which was offered him; but when he did understand it, he received the money with a smile, but immediately paid it back again to account of the horses which the dealer had contracted to furnish for the army.

Our author mentions another instance of the honesty of his colleague, less with the view of doing honour to his memory, than

with the hope, feeble as that was, of its having some effect in checking the prodigality of certain ministers of the day. It had become necessary, after the 18th Brumaire, that Moreau should send one of his divisions to the army of Italy, and that the Minister of War should carry into execution this order of the Consuls, dated 15th Floréal 1800. Carnot, with six officers of his staff, two couriers and a domestic, repaired to Germany, inspecting on their way the troops stationed between Dijon and Geneva. After passing through the cantonments on the Rhine, they visited the forts, and having fixed with the General-in-Chief the plan of the future campaign, they returned to Paris. The Treasury had allowed 24,000 francs for this service. On his return Carnot paid back 10,680, having in the expenditure of 13,320 francs, acted liberally to his companions, and obeyed the orders he received to give splendour and importance to his mission at the principal places which he visited. The Clerks of the Treasury did not know how to enter the sum of 10,680 francs in their books; but upon turning back to the period when, as a representative of the people, Carnot had inspected the Republican armies, the Clerks of Finance found in their Registry the very entry which they sought, and this as often as Carnot had fulfilled his mission.

That the cold and reserved manners of Carnot were united with a warm and affectionate heart, M. Arago has given the most ample evidence. "He was certainly not," as D'Alembert said of one of the Secretaries of the Academy, "*a volcano covered with snow*," but there was about him "something which went straight to the heart, which touched, and moved, and electrified it." His noble conduct to Latour d'Auvergne, and to Colonel Bisson, under very different circumstances, has been described with such beauty and power by M. Arago, that we regret the necessity of abridging such interesting details. General Latour d'Auvergne, distinguished by his learning as well as his bravery, was descended from the family of Turenne. When the Revolution broke out and deprived him of all the advantages of his position, he hastened to the field when the frontiers of his country were assailed. He refused all promotion beyond the rank of a captain; but in order that his eminent services might be made available to the State, Carnot collected into one corps all the companies of grenadiers in the army of the Western Pyrenees, and having removed every officer above the rank of a captain, older than Latour d'Auvergne, the modest soldier found himself charged with an important command; and so brilliant were the services of this remarkable body of men, that it received from the Spaniards the name of the *Infernal Column*. When Carnot became Minister of War, Latour d'Auvergne quitted for a third time the literary pursuits which were so dear to him, and offered to serve

under Moreau. Carnot could not bear to see the commander of the Infernal Column, the author of the *Origines Gauloises*, and a correspondent of the Institute, arrive on the Rhine as the most obscure combatant. The title of "*First Grenadier of France*" struck his imagination. Latour d'Auvergne was officially invested with it; and without removing the epaulettes of the grenadier, he became equal in the soldiers' eyes, if not superior, to the first dignitaries of the army.

"The first grenadier of the Republic," says M. Arago, "was killed by the stroke of a lance on the 27th June 1800, at the battle of Neuburg. The whole French army bitterly lamented his loss. As for Carnot, his profound grief inspired him with an idea which antiquity, otherwise so idolatrous of military glory, might have envied. According to an order which he issued when the 46th demi-brigade was reformed, the muster always commenced with the name of *Latour d'Auvergne*. The grenadier who stood at the head of the first rank then advanced two steps, and replied so as to be heard over the whole line, 'Died on the field of honour!' (*Mort au champ d'honneur!*) The brief, expressive, and solemn homage which a regiment thus paid every day to him who had distinguished himself in its ranks by courage, wisdom, and patriotism, ought, I think, to maintain that spirit by which heroes are nursed. I affirm, besides, that the noble words repeated in the barracks, in the guard-room, beneath the tent, and at the bivouac, had deeply engraven the recollection of Latour d'Auvergne on the memory of the soldiers. Whence came these long lines of grenadiers, cried the staff of Marshal Oudinot, when in the first days of October 1805, the advanced guard of the Grand Army passed through Neuburg? Why do they deviate from the route pointed out to them? Their silent and solemn march excites curiosity—they are followed and observed? The grenadiers went, gentlemen, near to Oberhausen, to whet their sabres on the rough stone which covered the body of the first grenadier of France!"—*Biographie, &c.*, pp. 111, 112.

The anecdote of Colonel Bisson is no less touching and instructive. "At the battle of Messenheim, near Inspruck, in 1800, General Championnet had noticed the bold intrepidity of Colonel Bisson, and asked for him the epaulettes of a general of brigade. Weeks passed without any news of his promotion. Bisson becomes impatient, waits upon the minister, and addresses him in an angry and brutal manner. 'Young man,' replies Carnot, calmly, 'it is possible that I may have made a mistake, but your uncivil manners may prevent me from correcting it. Go—I will inquire carefully into your services.' 'My services!' replied the Colonel; 'ah! I know too well that you despise them,—you, who from the floor of this office send us coldly an order to die. Away from danger and the severity of the seasons, you have forgotten, and will still forget, that our blood flows, and that we lie upon the ground.'—

‘Colonel,’ replied the Minister, ‘this is too much; it is for your own interest that our conversation is not continued in such a tone. Withdraw! your address if you please? Go—and in a short time you will hear news from me.’ These last words, delivered in a solemn tone, opened the eyes of Colonel Bisson. He hastened to seek for consolation from a devoted friend, General Bessieres. Here, however, he was made to understand that a council of war would be the necessary consequence of his folly. Expecting this, Bisson hides himself, and a faithful servant goes hourly to the hotel to find the dreaded summons. The ministerial packet at last arrives. Bisson in great excitement tears open the cover. The packet, gentlemen, contained the brevet of General of Brigade, and the letters of service.” The repentant soldier rushed to the war-office to express his gratitude and admiration; but, though he was denied admission, he published in the evening the particulars of the results of his interview with Carnot.

The following is the eloquent conclusion of the Life of Carnot:—

“Of all the qualities,” says M. Arago, “of which great men may boast, Modesty seems to be the least obligatory, and those who deem it of the greatest value, are those for whom it will procure the most durable fame. Who, for example, does not know by heart the letter which Turenne wrote to his wife 170 years ago, on the day of the celebrated battle of Dunes. ‘The enemy have come to us, they have been beaten. God be praised. I have been a little fatigued during the day. I wish you good night, and I go to bed.’

“Carnot did not forget himself less than the illustrious general of Louis XIV., not only among his intimate connexions, but even when he wrote to the Convention. I have already mentioned to you the part which he took at the battle of Wattignies. Read the bulletin which this memorable and decisive event inspired, and you will in vain seek in it any words which remind you of the representative of the people. ‘The Republicans charged with the bayonet in advance, and remained victorious.’

“All of you, too, who have known Carnot, tell me if he ever without a direct and pressing invitation, willingly conversed with you about those European events which he had so often directed. Justly jealous of the esteem of France, the former Director, while in exile, replied in writing to the calumnies of his accusers. His argument was on such occasions spirited, poignant, and severe. It was visible in each line that it proceeded from a wounded heart. Nor did the most legitimate invitation ever lead our colleague beyond the circle which his enemies had marked out. His defence might in some respects resemble an attack, but in reality when more narrowly examined, it was still a defence. Carnot disclaimed the thought of erecting a pedestal with the immortal trophies which he had

achieved during his Conventional and directorial career. Modesty, gentlemen, is of a noble character when it thus triumphs over passion.

“In matters of science, the illustrious academician exhibited the same reserve. It might be truly said that he regulated his conduct by the reflection of one of the oldest and most ingenious of your interpreters. ‘When a philosopher speaks for the instruction of others, and in the exact measure of the instruction which they wish to acquire, he confers a favour. If he speaks only to shew his own knowledge, the favour is conferred by those who listen to him.’

“Modesty, too, is a quality worthy of esteem and respect only when it exists in individuals. Public bodies, and academies in particular, would be guilty of an error, and would fail in their highest duty, if they neglected to display before the public the legitimate titles which they have to the esteem, to the gratitude, and to the admiration of the world. The more they are justly celebrated, the greater is the desire to belong to them, and the more will the laborious efforts which they make to attain this end turn to the advantage of science and the glory of the human mind. This sentiment, gentlemen, has encouraged me to unfold before you in all its details and in its true light, a life so full, so varied, and so stormy as that of Carnot. For nearly two centuries the Academy of Sciences has with religious care preserved the memories of the geometers, the natural philosophers, the astronomers, and the naturalists who have adorned it. The name of the great citizen who by his genius preserved France from foreign subjugation, ought, I think, to be inscribed with some solemnity in this glorious Pantheon.”—*Biographie, &c.*, pp. 115-117.

Such was the man whose career terminated in exile—a man above all Greek—above all Roman fame. France can forget Carnot only when she is herself forgotten. The tablet of Parian marble, on which his friend has sculptured his virtues and engraven his wrongs, will convey to every clime, and preserve for every age, the lesson which it so emphatically records. But another monument—one which appeals to the eye, and rises to the heavens, is still due to the warrior who defended his country, and to the sage who adorned it. The ashes of such a man cannot rest in the land of the stranger. The blow which struck the Bourbons reversed the sentence which drove Carnot into exile; and France must yet claim from Prussia the mortal remains of the noblest of her sons. Paris with one heart will welcome them within its walls, and the hands of the wise and the brave will place them near the heart of Turenne, which Carnot had deposited beneath the dome of the Invalids, and near the ashes of Napoleon, whom he first ushered into the field of glory, and whom he last defended when that glory was dimmed.

In thus pleading the cause and emblazoning the deeds of departed genius, let us not overlook the lessons of warning and of

wisdom which they breathe. The biography of him who was at once a statesman and a sage—a patriot and a warrior—an idol and an exile—an affectionate father and an unchanging friend—a man whom no immorality had stained, and no avarice dishonoured—the biography of such a man is the most instructive of all homilies—the brightest of all examples. By the dimensions of the moral and the intellectual giant, we are enabled to scan the stature, and mark the symmetry of other minds, and during this humbling process we cannot but measure the littleness, and mourn over the weakness of our own. Nor is this the only legacy which a Great Man bequeathes to his race. The contemplative mind strives to discover the principles by which so god-like a form has been moulded, and the training by which such mental powers have been developed and applied. The truths which we thus seek are not, like many others, which lie at the bottom of a well; they are seen in their counterparts, lying on the surface and leavening the mass of social life. They appear in the absence of those lofty principles which can alone secure the happiness and promote the moral and intellectual advancement of nations. They are proclaimed “on the house top”—in the ignorance and crimes of the people—in the degeneracy of the priest—the selfishness of the legislator—and the pusillanimity of the statesman. They are displayed in genius neglected—in knowledge taxed—in talent and worth excluded from office by the tests of a fanatical and a sectarian intolerance.

In such an atmosphere there is no vital air in which patriotism and public virtue can breathe. Their very seeds may die—and the memory of illustrious men, the salt of the earth, may perish for ever. A Washington illustrated the century that has passed. A Carnot has adorned that which is passing. Can our annals produce a name like these—of one who lived for the future—who identified himself with his country, and who in the hurricanes of revolution and of war, would have lashed himself to the mast, to live or to die with the vessel of the State?

- ART. IX.—1. *The Principles of Political Economy.* By J. S. MILL. Second Edition. London, 1850.
2. *Memorial to Lord John Russell and Sir George Grey from the Metropolitan Sanitary Association.* London, 1851.
3. *General Report of the Sanitary State of the Labourers of Great Britain.* London, 1842.
4. *Report of the General Board of Health on the Supply of Water to the Metropolis.* App. I. *Returns to the Queries Addressed to the Water Companies.* II. *Engineering Reports and Evidence.* III. *Medical, Chemical, and Geological Evidence.* London, 1850.
5. *Report of Do. on the Epidemic Cholera of 1848-9.* Appendix (B) to Do. Report by Mr. GRAINGER. London, 1850.
6. *A Microscopic Examination of the Water Supplied to the Inhabitants of London.* With Coloured Plates. By Dr. ARTHUR HASSALL. London, 1850.

THE law of *Laissez-faire*, held by some of the earlier political economists to be absolute and inviolable, is gradually receiving its due limitations, without losing its ground as a law founded on the right, or rather on the duty, of every man, to be self-energizing and self-developed. “*Laissez-faire*,” in its extreme meaning of “no human government whatsoever,” is in fact the ideal state of mankind, the realization in society of Augustin’s “*Ama, et fac quicquid vis* ;” and in proportion as men are men, and their humanity on all points whatever is developed and perfected, they may be safely left to the suggestions of their own hearts and reason.

But “*Ama, et fac quicquid vis*,” is by no means identical with “*Ama teipsum, et fac quicquid vis* ;” and a state of society in which self-interest is the ruling motive of action, is not to be treated as one in which a one divine inspiration, a one reason, a one purpose, rule all alike. And how far we are from this latter ideal state, how near to that former bestial one, we all know but too well. We are in an abnormal, in what Scripture—in words which will after all prove to be the most terse, deep, and scientific—calls a “fallen” state ; we have deflected from our ideal ; we have been untrue in every age and clime to the laws and constitution of our species. Overlooking this fact, the earlier political economists were too apt to look at the present accidents of human society as if they were its constitutional and ideal phenomena. They often mistook the tendencies of fallen man for eternal laws, and commanded that he should be left to live an ideal life of free self-government, while he was,

de facto, a slave to his own lusts and passions, and a tyrant to those weaker than himself; and among the vulgar, there have been always selfish, lazy, or lawless hearts, ready to raise in response a cuckoo-cry of "Leave us to ourselves—it is the law of the universe;" ignoring the fact, that to leave them to themselves, means to leave those weaker than them to be their prey.

The truth is, that, in proportion as any man, or nation, or class, are fallen—in proportion as they are beasts, savages, or children—thus unconditionally to apply *laissez-faire* to them is as gross cruelty, in the form of justice, as it would be to leave a kennel of mad dogs to bite each other; a tribe of savages to be decimated by small-pox, because there was no demand for vaccination among them; a child to run naked in the woods to shift for itself, and, if not poisoned by wild berries or eaten by wolves, develop its individuality freely into a "Peter the wild boy."

At "the other pole of the antinomy," as the Germans would say, stand the advocates of paternal government. These, too, have a truth upon their side; but these, like those advocates of *laissez-faire*, already referred to, have turned their truth into a falsehood and a tyranny, simply by urging it unreservedly. It is true that all government should be paternal; but then the word paternal must be defined—and defined in accordance with the duties of a father. It should, doubtless, help and guide all those who are unable to help and guide themselves. It should coerce those who are blind to the interests of their neighbours and the common-weal. In short, if any class be beasts, they must have tamers; if savages, they must have tutors; if children, they must have parents. But for what purpose? To keep them what they are? Surely not; but to raise them to that which they are not—to make the beasts men; the savages civilized; the children adult and self-dependent sons—in short, to restore them to that very ideal from whence they have fallen. "Paternal governments," so called, have ignored this; they have ignored the fact of there being a possible ideal of man—a redemption ready for fallen man, a kingdom of God on earth—and therefore it happens, significantly enough, that those governments which have been the most doggedly quasi-paternal, have been either utterly godless, or else Romish—that is, belonging to the religion which denies individual responsibility, the right to individual development, and a really human, not a merely ascetic and saintly, ideal of man. The most complete paternal government of our own times, that of Austria, has an explicit combination of both these elements—of a mixture of sheer Atheism and sheer superstition, both in governors and governed.

The office of all government, paternal or other, is, as the

Bible sets forth, self-sacrifice, and not selfish advantage; and the perfect method of fulfilling that self-sacrifice, is gradually to render its own office unnecessary; to teach its subjects, not merely to obey it, but to do without it; to be, in short, truly paternal, by educating its children into sons, who may go forth and labour freely for themselves, and on their own responsibility, according to the laws which have been taught them, and with that sense of a common brotherhood, a common family interest, which they have acquired under their father's teaching.

The advocates of either method, then, properly limited and explained, seem to have a truth on their side. There is surely some one mesothetic truth, deeper and wider than either, which underlies and explains both, and to act on which is to act on both at once without violating either. The discovery—or resuscitation—of such a truth seems to be the chief problem of social government; and to be especially needed, and therefore perhaps especially easy to discover, in this present age.

But, in the meantime, there are practical canons enough already laid down to guide us safely in our mode of dealing with particular cases. One such is given in the following passage from the second volume of Mr. John Stuart Mill's *Political Economy* (page 521):—

“ § 7. We have observed, that, as a general rule, the business of life is better performed when those who have an immediate interest in it are left to take their own course, uncontrolled either by the mandate of the law or the meddling of any public functionary. The persons, or some of the persons, who do the work, are likely to be better judges than the Government of the means of attaining the particular end at which they aim. Were we to suppose what is not very probable, that the Government has possessed itself of the best knowledge which had been acquired up to a given time by the persons most skilled in the occupation, even then the individual agent has so much stronger and more direct an interest in the result, that the means are far more likely to be improved and perfected if left to his uncontrolled choice. But if the workman is generally the best selector of means, can it be affirmed, with the same universality, that the consumer, or person served, is the most competent judge of the end? Is the buyer always qualified to judge of the commodity? If not, the presumption in favour of the competition of the market does not apply to the case; and if the commodity be one in the quality of which society has much at stake, the balance of advantages may be in favour of some mode or degree of intervention, by the authorized representatives of the collective interest of the state.

“ § 8. Now, the proposition that the consumer is a competent judge of the commodity, can be admitted only with numerous abatements and exceptions. He is generally the best judge (though even this is not true universally) of the material objects produced for his use.

These are destined to supply some physical want, or gratify some taste or inclination, respecting which wants or inclinations there is no appeal from the person who feels them; or they are the means and appliances of some occupation for the use of the persons engaged in it, who may be presumed to be judges of the things required in their own habitual employment. But there are other things of the worth of which the demand of the market is by no means a test; things of which the utility does not consist in ministering to inclinations, nor in serving the daily uses of life, and the want of which is least felt where the need is greatest. This is peculiarly true of those things which are chiefly used as tending to raise the character of human beings. The uncultivated cannot be competent judges of cultivation. Those who most need to be made wiser and better usually desire it least, and if they desired it, would be incapable of finding the way to it by their own lights. It will continually happen, on the voluntary system, that the end not being desired, the means will not be provided at all, or that the persons requiring improvement having an imperfect or altogether erroneous conception of what they want, the supply called forth by the demand of the market will be anything but what is really required."

Now these observations, like those which precede them, apply directly to the Water Supply of large towns. Here the end proposed is pure and wholesome water. That the consumer is not the best judge of this, is sufficiently proved by the facts—that people are often content for years to drink, under the name of water, fluids which physicians know well, and indeed often warn them in vain, to be mere diluted poison,—that the substances which make water unwholesome are generally impalpable except to microscopic examination or chemical tests,—that diseases produced or aggravated by them, such as calculous disorders, dyspepsia, cholera, &c., are not suspected by the mass of water consumers to have the slightest connexion with the liquid which they drink,—and that, therefore, to use Mr. Mill's words, the presumption in favour of the competition of the market does not apply without limitation to water supplies.

Moreover, to continue our comment on the paragraph which we have just quoted, cleanliness may surely be classed among those things "the want of which is least felt where the need is greatest." If the uncultivated are no competent judges of cultivation, surely the dirty are equally incompetent judges of cleanliness. If Mr. Mill's remarks refer, as he well says, to those things which have a peculiar tendency to "raise the character of human beings," surely cleanliness, which stands in first rank among such things, is within its scope. It is surely, as the old proverb says, next to godliness; without it education is half powerless, for self-respect is all but impossible. We do not speak of the stains contracted by honest labour, which the

butcher or the nightman washes off after his daily work, and returns at once to decency and comfort, but of the habitual ingrained personal dirt, where washing is either impossible or not cared for; the dirt which extends itself from the body to the clothes, the house, the language, the thoughts; the dirt of thousands and ten thousands in our great cities, who literally never dream of washing, simply because it has been to them from childhood a luxury as impossible as turtle or champagne. Among these the demand for water, like that for education, is exactly in inverse proportion to the need. Are these creatures, at once animals, savages, and children, to be left for pure water to the laws of market demand? They do not even require it for drinking. Gin and beer are their beverages. We shall see hereafter what strong excuses they have for resorting to these even when water is at hand, much more then when for washing their rags it has to be begged or stolen, and that only three times a-week. But there is surely another case in which the law of *laissez-faire* admits of modification, namely, when the commodity is one which is necessary to the consumer, but of very small profit to the producer. There are things which would be incalculable blessings, we may boldly say, which are absolute necessities to the poor, with which private speculators have but a very small interest in providing them, on account of the small price which they are able to give in return: and water is one of these. Too many town landlords are well aware what very little direct interest they have in seeing that the wretched houses from which they draw their rents are properly watered and sewered. Their tenants are careless about cleanliness. They do not refuse to take a house because it is unprovided with the commonest decencies of life. Or again, they must live near their work, and take any hovel which they can find. Or again, the increasing demand for houses treads so close upon the heels of the increasing supply, that the landlord can obtain an exorbitant rent, let the state of the house be what it will, and let it again the very day the house is unoccupied. All these influences are more or less at work in the crowded districts of our great cities, and are especially strong in vast tracts of the metropolis; and wheresoever this is the case, any attention to water or sewage on the part of the landlord is a mere alms, a waste of capital in a commercial point of view. It is true, his tenants are decimated by rickets and consumption, fever and cholera; but *he* lives in a very different quarter. His own house is comparatively well watered and sewered.

“Let the galled jade wince,
His withers are unwrung.”

And, in the meantime, his tenants are too ignorant, too careless, above all too poor, to make the necessary improvements for themselves; and being, at most, tenants by the quarter or the half-year, they cannot be expected to invest their earnings and create a demand for permanent improvements in houses which they may leave in a few months. This is, we assert, the normal state of all the poorer districts of London, of too many provincial towns, and of the greater part of the agricultural districts. Is it one which is to be left to right itself? It has been given up hitherto to *laissez-faire* and individual self-interest; and as for the fruits of it, if our own eyes and noses will not demonstrate them to us in a walk through any of the poorer streets in London, one single statistical fact should be enough to carry conviction to the most obstinate supporter of no-government. When the cholera of 1832-3 ravaged London, one person out of every 255 died. That this epidemic was, if not entirely caused, yet infinitely aggravated, by the defective quality and quantity of the London water and sewage, which latter item very much depends upon the quantity of the water supply, was notoriously and indisputably proved by medical and scientific evidence of every kind. We need only instance the invaluable Report on the Sanitary Condition of the Labouring Population, by Mr. Chadwick. That Report was published in 1842. The cholera returned in 1849. Had the sanitary condition of London improved one whit in the interval? So far from it, the deaths from the same cause in the second attack amounted to ONE in every ONE HUNDRED AND FIFTY-ONE, or four-sevenths more than in the first one. This fact we think needs no comment.

While such a patent practical refutation stares us in the face, we cannot help wondering at the assertions of a certain portion of the press, that Government had much better leave the Londoners alone; that they know their own interests, and can manage their own water supplies perfectly for themselves.

No doubt they can; but can they manage the water supply of the poor? If they can, why have they not managed it? They may understand their own interests; but do they understand the interests of the poor? And will they prefer their own interest, or that of the poor, when the two happen to clash, as they do in this case? If they do, why are things as they are? Surely, if the existing water companies, the parochial and district boards of the metropolis, and the general demand of the London public, be so competent to induce a proper water supply for the future, that competence ought to be shewn by the proper state of the water supply at present. Similar causes should produce similar effects. We can judge of what the metropolis will do for itself, only by what it has done. Let us see what it has done, on the

method of private speculation by quasi-competing, but really monopolist, companies.

Nine years ago, Mr. J. Liddle, one of the medical officers of the Whitechapel Union, stated that, in his district,—

“There was not, in the poorer districts, such a thing as a house with the water laid on, or furnished with a sink for getting rid of the waste; that they had only a very scanty supply from stand pipes, *kept in tubs in the rooms in which they lived*, (and therefore saturated with the gaseous and organic matters given off in the breath, . . . perhaps with worse;) . . . that their washing consisted of merely passing very dirty linen through very dirty water (the hardness of the water preventing the soap from lathering properly), causing a smell most offensive and injurious to their health; that the filth of their dwellings was excessive, and that of their persons likewise.”

We omit the sickening accounts of the utter want of sewage, as foreign to our present subject; though it must never be forgotten, that, without a plentiful and constant supply of water, the most scientific and complete sewage system is a nullity. Now, every clergyman and medical man is aware, that this is no exceptional case; that there were, nine years ago, thousands of houses all over London in the same state as these Whitechapel ones, and worse; and that all public authorities, water companies, and landlords, must have been aware of their existence; for Mr. Liddle's evidence, with much more to the same purpose, appeared in the Report of 1842, to which we have just alluded,—a work which, attacking, as it did, vested interests innumerable, was sure not to have escaped the notice of the parties interested,—to have opened their eyes, if not their hearts, to the deadly consequences of their neglect,—and to have aroused them, if anything would, to examine into the state of the poorer districts which they professed to supply, and remedy evils patent to every sense—of those not interested in insensibility. They cannot, therefore, for the last nine years at least, plead ignorance of their own lâches. Let us see, now, what improvement they have effected during that period.

LETTER FROM JOHN LIDDLE, ESQ.

“4, *Alie Place*, Jan. 5, 1850.

“DEAR SIR,—There are several courts in the Whitechapel Union which are without a supply of water. In all, there is a deficient supply. The poor inhabitants are for the most part supplied with water from a stand-tap, the water from which flows daily for a short time (from one hour to three hours). Some of the houses where the poor reside are three stories high; and as the water only flows for a limited time in the court, the lodgers in the attics of these high houses must either go without water entirely, or obtain a limited supply with a great deal of labour and loss of time.

“ In Johnson’s charge, where more cases of illness have occurred than in any other locality in Whitechapel, the only supply of water for the inhabitants is a pump, the water from which is said to be unfit to drink, and the poor people are obliged to obtain their supply from a neighbouring court, and they have great difficulty in procuring it, the inhabitants objecting to let them have any.

“ In Cartwright Street, the inhabitants are supplied from a well, the water from which is pumped into a tank, and pipes are connected with it, from which the butts in the houses in the neighbourhood are supplied. But the machinery is sometimes out of repair, and the inhabitants have then to obtain water elsewhere. In some instances, the water-butt is adjacent to the privy.

“ In Hebrew Place and Love Court, Middlesex Street, the tenants of one of the landlords are without any supply of water except that which they may obtain from a pump. Here these poor people say that the water from the pump is so bad that they cannot use it, and they are obliged to beg it from their neighbours. In this case the landlord had a dispute with the Water Company, in consequence of their giving him notice to raise the water-rate during the rebuilding of some of the houses; alleging, as the reason, that the quantity of water which was required for the mortar of the houses was much more than was needful for the occupants. The landlord resisted their demand, and *the water was cut off*.

“ In the month of August last, a complaint was made by a party residing in the eastern extremity of Whitechapel, to the trustees, of the bad state of the water which was delivered into their premises. A sample of the water was shewn to the trustees; it was most foul and foetid. A committee of the trustees was appointed to make inquiries into the case, and found it as described. The Water Company was written to, and new pipes were laid down. Whether the Company made any deduction from their annual charge, I do not know.

“ The water which is delivered into my own house is unfit to drink, unless previously filtered. It is usually turbid. All complaints are of course useless. The only reply would be to a complaint, ‘ *If you don’t like it, we will cut it off.*’—Very truly yours,

“ JOHN LIDDLE.

“ P.S.—The trustees recently passed a resolution complaining of the bad quality, deficient quantity, and extravagant charge for watering the parish.

“ ALEX. BAIN, Esq.,

“ *Assistant Secretary, General Board of Health.*”

Poor Mr. Liddle! And this is his latest news! Surely “wisdom crieth in the streets, and no man regardeth her.”

And let no one suppose this to be an exceptional case. We distinctly deny it to be such. We assert that there is hardly a group of houses of the poorer class in London, in which the supply of water is not scanty in quantity, deficient in quality, and supplied by a method which defiles and wastes it as much as

possible, while the sewage, till the late Government improvements were commenced, was bestially inefficient.

“In the city of London,” says that energetic apostle of baths and washhouses, Mr. Bowie, “the water is in general very scanty, and sometimes altogether wanting; often thick, muddy, putrid, unfit for use.” He enumerates, “among a host of others,” thirteen courts and alleys, where the inhabitants state that “there was no water laid on.” “They got it where they could, by begging, borrowing, and from the neighbouring pumps.” “They have been without water for eight years, and often more in need of it than victuals.” “Water dipped with pails, and very dirty;” . . . “often looks quite yellow;” . . . “only fit to rinse a pail or cleanse the privy;” . . . “tastes as if putrified, and often contains worms an inch long.” “A gully hole in connexion with the pump.” “There is also,” say Mr. Bowie and many other witnesses, “an evil of considerable magnitude likely to arise from the practice of having public pumps or stand-cocks. It is, that as women and children have to go and wait their turn, they may come in contact with persons of the very worst character, hear very bad language, and at last become regardless of decency.” And this, be it never forgotten, is the state of things in the only part of London which has a local government.

The same disgusting evidence is given by Dr. Hector Gavin, as to a considerable part of Shoreditch, one-half of Hackney, and nearly the whole of Bethnal-Green, in themselves rather great towns than districts. Perhaps, too, some of our readers may have read in the pages of the *Morning Chronicle* of Jacob’s Island, Bermondsey, where—until private persons totally unconnected with the locality interfered—a respectable population of dock-workers had, literally, no other water to drink than that of the same stagnant open sewer into which the whole filth of their houses was thrown.

All these instances, with the exception of Jacob’s Island, are north of the Thames; but when we add to these the still worse state of the poorer dwellings on the south bank, throughout the vast and crowded tracts of Lambeth, Bermondsey, Rotherhithe, Southwark, and Newington (the chief seats of cholera), the whole presents a picture more like some foul and fantastic nightmare, than an account of the metropolis of the greatest nation in Europe.

The blame of all this must be divided between the house-owners, the Water Companies, and the Local Boards. Of the inefficiency of these latter in the whole matter, the state of things gives full practical proof. Not that they are composed of worse men than other local boards, but that the constitution of London is different from that of any other large city in these islands. In almost every other city or town, there is one central and cor-

porate authority, composed of men of all ranks, and containing a good proportion of bankers, manufacturers, merchants, and other men of a class above ignorance, hasty and reckless greed, and private jobbery. In any water-scheme, these men will have the most important, if not the sole voice. If the corporation are the suppliers of water, the central authority has full play, and Government interference, except in the form of inspection, as in the case of railroads, is unnecessary. Even if the town be supplied by one or more water companies, the corporation will be able, as in the case of Nottingham, to make their own terms with them, with a due regard to the public benefit, not only as a matter of benevolence, but also of poor-rates. In most cases the most wealthy, best educated, and public-spirited members of the corporation, will be among the capitalists of the water-scheme; and thus, as in the case of most Scotch and north-country towns, the general consolidation of different interests will work well and wholesomely, especially if the area of the town be small enough for a single scheme to be projected and carried out by one or two public-spirited men, who command the respect and attention of their fellow-townsmen. Yet even in these cases, we find complaints of competition between different companies, and longings for more complete union and centralization. Mr. Hawksley, the celebrated engineer, in his evidence on the New Nottingham Water Supply, which has become famous from its extraordinary success in all but annihilating the causes of cholera between 1833 and 1849, speaks strongly against the disadvantages, even there, of want of united management. It is needless to quote further evidence on this point; a summary of the whole question seems to us to be contained in the following opinion of Professor Clark of Aberdeen, the justice of which, we think, will be at once evident to all our readers.

“Living in a town (Aberdeen) with a population of nearly 70,000 inhabitants, where the water is supplied, not by a joint-stock company, but by the Commissioners of Police, who are elected by the rate-payers, it has often occurred to me to question the policy of allowing water to be supplied to a town by a joint-stock company, in any case whatsoever. The extensive pipes laid throughout all the streets, and branching to all the houses, cannot conveniently, nor without a great sacrifice of expense, be laid in a second set, much less a third; therefore competition, such as occurs in the supply of bread and meat, or of like articles of demand, is out of the question in regard to the supply of water on a large scale. The establishing of a joint-stock company for the supply of a town by water, is the establishing a monopoly of trading persons, having the power, without responsibility, of taxing the inhabitants for their own benefit. The practical check on any crying excess in their charge, and on their heedlessness about supplying water of a proper quality, lies mainly

in the apprehension of a second company being established ; but since no new works can be undertaken without an Act of Parliament, and without risk of competition with the old company, such as almost always proves ruinous to both ; and since, in order to establish the new company, an agitation in the community has to take place, the check is not of a desirable kind ; neither is it effectual in the generality of cases."

Now, Dr. Clark, it will be seen, goes even further than we do ; for we have pointed out cases in which a joint-stock company might exist harmlessly, by being all but identified with the corporation itself. But it must be remembered, that in the metropolis this possibility does not exist. There is there absolutely no central or corporate authority. With the exception of the City itself, with "its very badly constituted, and very badly administered local government," (to quote Mr. J. S. Mill's words,) it is in reality a mere congeries of huge overgrown parishes, each a large town in itself, but in general with no authorities but parochial ones, and the innumerable confused and complicated boards of surveyors, trustees, &c. &c., which have grown up, they hardly know how themselves, according to special exigencies. Hence no unity in road-making, no unity in sewage, no unity in water-supply. All London drives through a great street in one parish, yet that parish alone, often has to pay for the whole wear and tear. Or perhaps parish A will not go to the expense of improving the upper end of Blank Street, because parish B persist in leaving the lower end of it a slough. Parish A cannot, or rather, till the happy revolution of sewage governments, two years ago, could not drain itself, because parish B lying lower, refused to lower its sewers. Or parish A and B, having each their own private interests, and, alas for poor human nature ! their own private pets, and relations, and jobs, ran each of them their own huge useless sewer to the river, along a high and therefore comparatively useless level ; when, if they had combined, they might have run one along a lower level, saving half the expense, and doing the work effectually. And as for water-supply, parish A, B, and all the rest of the letters feel it most honestly a matter beyond them—so vast and important, that like all vast and important things, the only power capable of coping with it is—blind chance.

Moreover, the local governments of London are especially in the hands of the shopkeepers, and the owners of small tenements. The proportion of manufacturers and large capitalists, except in the city, is by no means great. The noblemen who own London land have generally let it pass out of their own control on long building leases, and confine their real care to their county estates. Few or no gentlemen have a strong interest in London parochial

government; and thus the vast majority of London parishes, perhaps the whole of those which require water and sewage, are in the hands of shopkeepers, middlemen, and persons bound up with them by various ties, often more potent than disinterested. Thus in any sanitary case, the same body of men are too often both criminal and judge, and the well known abomination of a bench of game-preserving squires sitting in judgment on a poacher is enacted 'en grand' at every vestry, by some hundreds of shopkeepers, with this slight difference, that the lives of human beings, and not of hares, are in question. Doubtless, the London middle-classes have many good qualities—all classes have, for that matter—but that they are not the people among whom one would look especially for either chivalrous self-sacrifice or scientific enlightenment, let their conduct in the matter of the Smithfield nuisance witness. That something or other steels them to evils patent to every medical man, the present state of London proves; and even the best of them, in the hurry of business and the unceasing struggle of competition, now becoming daily more and more demoralized by puffery and adulteration, are too apt to thrust out of their sight and mind any investments of capital but those which promise the most immediate returns. The whole modern habits of the middle-classes in great cities tend to make them live from hand to mouth; to forget foresight for present gain; to be yearly more and more swayed by individual or trade-interests, less and less alive to corporate ones, least of all to the interests of those classes below them, whose welfare, however surely, yet still only indirectly and invisibly affects their own. And these evils are daily increasing. While we write, puffery spreads, adulteration, as in the case of substituting chicory for coffee, openly triumphs, and insults men like Mr. Baring, who attempt to prevent it; slop-selling thrives, and master sweaters become public officials and lawgivers to the metropolis Conceive entrusting the water and sewage of their workmen's dwellings to the tender mercies of Nebuchadnezzar & Co.!

There appear to us to be only two methods of making any thing like organized or harmonious sanitary reform in the metropolis possible. One is, to incorporate all parishes either north or south of the Thames, within the bills of mortality, into that to which they really belong, the City of London; and to make their constitution as democratic as possible, giving, if it can be done, a vote in vestry not merely to householders, but to every lodger, male or female, above the age of twenty-one, in order that the poor creatures who now suffer most from public neglect, may have some voice at least in its removal.

But this, if not altogether Utopian, is certainly a difficult and far

distant change; and, in the meantime, there appears to be but one alternative, the interference of government authority. Whatever just and time-honoured jealousy of such interference there may be in the minds of many, ought to be outbalanced by the recollection, that the British dislike of government interference arose from exactly the opposite cause from that which is now pleaded against it. Government interference was repulsed in old times, in order that the free efforts of the many might not be over-ridden by the few, by a clique or by a despot; to repulse it in this case, is to leave the many—the whole, in fact—of the working-classes of the metropolis, at the mercy of the few, for the supply of a vital necessary. The many and the few have changed places. Her Majesty's Government, if it brought forward a bill for supplying London with water, and compelling its extension to every dwelling, would surely be representing the feelings and interests of the great mass of Londoners far better than either the local boards or the water companies as yet have done.

With some such views as these, we conceive a society, calling themselves "The Metropolitan Sanitary Association," have memorialized the Government in a temperate and weighty address, to which they append a letter from Mr. John Stuart Mill, in answer to queries of theirs on the subject. In Mr. Mill's eyes, the question of Government interference with the Water Supply "is a question of general policy, rather than of political economy;" a wholesome rebuke, whether intentional or not, to that party which make a few economic canons, discovered by wiser men than themselves, the absolute measures of all things in earth, and in heaven also, when they trouble themselves with that distant and unimportant locality.

The whole letter is, as was to be expected, full of broad and weighty truths. Mr. Mill acknowledges the impossibility of any real competition in water supply; the necessity of monopoly, and therefore, when that monopoly is exercised by private individuals, of slavery; the defective administration of joint-stock company directors, (on which point he has already spoken in his *Political Economy*); the preference to be given to municipal authority; the non-existence of any such authority in London; the probability of the Government being best able to originate, if not to carry out a scheme of this kind; and, after giving due weight to the proper jealousy of Government coercion and meddling, which he justly praises as a sentiment to which this country owes the chief points of superiority which its Government possesses over those of the Continent, he concludes by proposing that, when a properly constituted local body shall exist in London, the water supply shall, under proper securities, be delivered up to its charge; and that, in the meantime, the work will be most

fittingly entrusted to a Commissioner appointed by the Government, and responsible to Parliament, like the Commissioners of Poor-Laws.

It is in vain to quote the late great improvement in the North British water supplies, and thence to argue for the non-necessity of Government interference. That such an improvement has taken place without compulsion, is an honour to Scotland and the rest of the North, but it is no test of the power of *laissez-faire* in other parts of Great Britain. London is not Glasgow, nor Reading Paisley, nor Oxford Aberdeen—nor any twelve towns in the South of England at all analogous to the twelve in the North, which Mr. Stirratt, bleacher, of Paisley honourably mentions; nor (it is a Southron who pens these words) is the slow and short-sighted Southron the canny, shifty, far-seeing Scot, with that mingled daring and caution of his which enables him to take the newest hint of science, without involving himself in the building of card-castles, and the riding of hobbies. In looking through these Government Reports, a Scot may well feel proud of the testimony they bear to the civilisation, and public spirit, and scientific excellence of his countrymen. But all Scotch savans must not expect to get the same hearing for their wisdom on the south side of the Humber which they do on the north. In their case the saying, that “a prophet has no honour in his own country” is strangely reversed. Playfair and Smith of Deanston are listened to in the Lothians; Clark and Angus Smith in Aberdeen and Glasgow. But South-Saxon soil still remains half-tilled, and South-Saxon towns unsewered and unwatered. The same fault to which old chroniclers attribute the ruinous weakness of England before the Norman Conquest, still besets all her doings; the isolating, individualizing selfishness, which makes every man “run to his own house,” and leaves the commonweal to shift for itself; the stubborn slowness, which is as dogged in the support of prescriptive wrongs as it is in that of prescriptive rights—these make the Londoner shut his ears to facts, and submit to evils which make his whole existence one of the strangest jumbles of artificial civilisation and primeval barbarism which the world has ever beheld.

What, for instance, is the quality of water which the London Water Companies, in the face of scientific warnings and public remonstrances, now find it consistent with their interest and the full market demand to supply?

In the first place, without exception, their supplies swarm with living animalcules, the presence of which, putting aside its disgustingness, as a mere matter of feeling, must be considered as indicative of unwholesomeness. These creatures are nature's

scavengers—their food is decomposing organic matter, animal and vegetable; they attend on putrefaction, as surely as the vultures on the fallen carcass. In this light they may be considered as warnings against disease, rather than causes of it; but many of them are capable of living and multiplying within the human body—many more of producing irritation in the intestinal canal, by the siliceous shells and spines, finer than the points of the finest needle, which envelop them; many minute fungi can propagate disease in a healthy organic tissue which has been inoculated with them. If any reader wish to instil into his imagination a wholesome terror and disgust of these wondrous atomies, we must refer him to the works and the evidence of Dr. Arthur Hassall, who has devoted many years to the investigation of this branch of microscopic science. Now with these creatures the whole of the water companies' supply teems; and not only with living animal and vegetable productions, but, worse still, with dead and decaying organic matter. The worst in this respect are those which supply the Surrey side of the metropolis, where, accordingly, the ravages of cholera have been principally felt. Several of these actually distribute to their wretched customers unfiltered Thames water—in a word, their own diluted sewage, swarming with the same animalcules which haunt the sewer mouths; and, in addition to these, Dr. Hassall has actually detected on various occasions, matters connected with sewage, such as black carbonaceous matter, portions of the husk and down-hairs of wheal, cells of potato, granules of starch, fragments of muscular fibre, tinged with bile.—We presume that the water supply of ancient Jerusalem must have been somewhat different to that of modern London. We do not require the horrors of a blockade to bring on us the threat of Rabshakeh to “the men who sit on the wall.”

The water of the companies north of the Thames gives a less disgusting ‘fauna,’ the water being by several companies filtered more or less—though we should say, less, rather than more, to judge by the list of ‘Actinophrydes, Desmidiæ, Diatomaceæ, Entomostraceæ, Annelida,’ and other filth-bred monsters, which, with occasional Thames Paramecia from the sewer mouths, make up the list of their fertility. In one case, the water which professed to be brought from pure country regions, is adulterated, if not with Thames water, still with water from the Lea, and furnishing, as Dr. Hassall says, ‘a mixture of ditch, spring, river, and well water’ swarming with organic life. Another, while it professes to derive all its water from a canal above the influence of the tide, has a communication with the sea within the influence of the tide and Blackwall Creek; and the other supplies are drawn, either from the Thames or from ponds and rivers which are ex-

posed to all the evil influences of stagnation, farm-yard ditches, abundant vegetation, and a public which disregards old Hesiod's warning about the sacredness of springs; and their supplies exhibit accordingly the animals and vegetables bred under such circumstances.

Such—for the whole evidence is too disgusting for us to enter into details—is the result of several hundred examinations of water, obtained from the service pipes of the different companies, and therefore in the state in which it is consumed by the public, And when it is remembered, that on the present cistern system, every house-cistern in the great majority of houses, is an alembic for further putrefaction, further multiplication of these wriggling monsters, for the absorption of lead from the cistern itself, of sulphuretted hydrogen from the neighbouring closets, even if none is already present (as is often the case in the south London water) from the Thames itself; that wherever this water is procured from stand-pipes, it has to remain in the dwelling rooms of the consumers, to give out its air, and absorb the vapours of their breath—we will neither finish our sentence, nor make any comment thereon.

It appears, moreover, that this water, even when filtered, is of a high degree of hardness, ranging by Dr. Clarke's soap-test, from 12 to 16½ degrees, and thereby entailing on the inhabitants a heavy tax, by the increased consumption of soap and tea, &c. &c., required by hard water, probably of more than double on the whole soap, and one-half on the whole tea, consumed. When we add to this, that in order to abridge this undue use of soap, soda is largely used by all London washerwomen, to the speedy destruction, as all housewives know, of the fabric washed; that from the experiments of M. Soyer, the hardness of the water interferes with all culinary processes; that, as is well known to every groom, it is highly injurious to horses, and, indeed, is naturally refused by all cattle which can obtain soft'. . . without mentioning the chapped skin, and fruitless scrubbing, which attend every attempt to wash in unboiled water in most parts of London . . . when we sum up all this, we have such a count against the present system, as certainly justifies Dr. Sutherland's dry and cautious remark, that it is "something like a positive injustice to give the poor no alternative between want and cleanliness, and the labour and expense involved in washing with water of from 12 to 16 degrees of hardness, when a softer supply might be attainable."

There seems to be great reason to suspect also, that the use of hard water increases dyspeptic complaints, and makes epidemics more severe and more fatal. Such certainly seems to be the conclusion from the following fact.

"Since the epidemic in 1832, the population in Glasgow south of

the Clyde, may be considered to have remained in the same state, with the exception of the introduction of the soft water supply. In one district, the parish of Gorbals, the attack of 1832 was fearful, while, in the attack of 1849, it furnished comparatively a small number of cases, the epidemic in the other parts of Glasgow being, as in the former cholera attack, very severe. The unanimous opinion of the medical society was, that this comparative immunity was owing to the soft water supply."

Similar evidence is given from Paisley ; but whether we attribute this particular improvement to the quantity, or, with the local medical men, to the quality, of the new supply, there cannot be a doubt that the substitution of soft for hard water, has a tendency to exterminate another class of diseases, one of the most frightful and agonizing which can beset humanity. In Paisley, it appears, calculous disorders, formerly very numerous, have during the last ten years all but utterly disappeared, except in parts not accessible to the soft water supply, or in cases from the chalk counties of England—i.e., from the strata which now supply hard water to London, and from which almost all the proposed plans wish still to supply it.

One more count remains of our general indictment against the present private monopolies of London water, and that a most important one. It is the extraordinary fact, that "under existing management the first and chief necessity to be provided for by water companies is *waste* of the supply, while the domestic consumption has occupied in reality only a secondary position."

The actual proportion of waste to domestic consumption, even under a system of constant supply by stand-pipes, seems, from the general carelessness with which matters are managed, to be very difficult to ascertain ; in many parts of London it is at least as *three to one*. No fact can speak more strongly to the utter wrongness of the whole system, its inefficiency and its expensiveness ; its inefficiency, in that the greater part of the supply is lost in the process of distribution, and the consumers have, of course, to pay for what they do not use ; and its expensiveness, in that a far larger amount of capital is invested in the business than is actually required, not merely to supply the present quantity to the consumers, but to supply a quantity equal to their real needs. It seems at first sight most puzzling to understand, how such enormous waste can be consistent with any remunerative profits. But so it is ; for the companies exist, and stoutly desire and struggle to continue in existence, leaving us to suppose that their profits must be, if not exorbitant, still far larger than, under a proper economic system, they need be, and these companies are now crying out for "full compensation" for their waste as well as their supply.

But, on the whole, we do not complain of these companies. They have but followed the maxims which all English society follows in these days—to get as much for their money as the public will allow them. The Grand Junction Company, the state of whose water supply is far superior to the rest, hardly forms an exception; for there being, as they themselves state, few or no groups of poor houses in their district, their customers, being of the better class, have, of course, kept up a demand for a better article; while those which supply the masses have been able freely to distribute an inferior article, at a price as high as they dared; and if men do not dare somewhat, when in possession of a monopoly, they must be more than men.

After all, these companies have but gone the way of the world: Beginning with a selfish competition, they have ended in monopoly. Even as two large trouts rush out, each from his separate nook, first to clear the pool of small fry, and then to settle competitively the exact extent of their respective beats, till after many battles, consuming strength and time in fighting instead of feeding, the stronger establishes himself at the head, and the weaker at the tail of the pool, and there is peace, and monopoly for each over all wretched smaller creatures—even so have they. Nine long years was one London company engaged in competition against three others, and secured its ground at last; at, of course, a waste of capital and labour—a “disastrous struggle,” as they themselves call it—so painful to their memory “that they feel it unnecessary to enter on it.” . . . Poor things! But they, and fairly enough too, intimate that they were not the only offenders. “The blame of what was wrong must at least be shared by the Legislature, which had sanctioned and encouraged the competition.” “The public, too, must also share the blame; the instances were numerous during the competition, where the company was requested by memorial to drive mains in some particular locality, the memorialists agreeing to take a supply on certain terms. This agreement was commonly forgotten when the mains were laid, and the rival companies were left to bid against each other for tenants to the point of ruin.”

Of course they were. The selfishness of the memorialists led them to tar on the rival selfishnesses of the water companies; and then the same selfishness led them to desert the poor exhausted combatants, when they became by fighting too exhausted to do their work well and cheaply. Oh purblind John Bull! who will go on doing evil, and making others do it, that good may come, who cannot see that an unrestrained selfish competition, when completely triumphant, may appear in the shape of his old bugbear, monopoly! In your selfish short-sighted

cunning, you thought you could get your water a little cheaper by trusting it to the self-interest of a few capitalists, and letting them beat each other down; and, behold, you are literally filled with the fruit of your own devices, with rats and mice and such small deer, paramécia, and entomostracæ, and kicking things with horrid names, which you see in microscopes at the Polytechnic, and rush home and call for brandy—without the water—with stone, and gravel, and dyspepsia, and fragments of your own muscular tissue tinged with your own bile. . . . Oh John! John! The love of money is the root of all evil! And even as it is now with your water-supply, so may it be soon with your clothes-supply, when you have petted and egged on a few large slop-sellers to eat up all the small ones, and then to combine in triumphant monopoly, to clothe you with devils' dust instead of cloth, and starch instead of linen. . . . Oh John! John!

Leaving now this water-company question, as one worth no more argumentation, we go on to notice the various schemes for a better supply of water to London which are now on foot.

One source which has been proposed is from Artesian wells, sunk through the London and Plastic Clays to the sand strata beneath, which furnish a soft water, considered by one or two gentlemen, on account of the quantity of carbonate of soda which it contains, to possess the quality of economizing soap (not, we fear, of economizing the fabrics washed in the said soap,) and enabling us to obtain in all cases (Soyer's experiments only assert in some few) a better extract from all matters exposed to its action, either hot or cold, and to be "the beau idéal of what a water ought to be for the supply of a city or town."

Now, granting that thirteen grains of sulphate of potash per gallon will not make the water nasty; that eight grains of glauber's salts will not make it purgative; that twenty grains of common salt will quench and not increase thirst; and that the eighteen grains of carbonate of soda is nothing but beneficent to the shirts and towels which will have to endure it; letting pass the small quantities of carbonate of magnesia, and phosphates, and crenic, and apocrenic, and silicic acids; granting that a North Briton fresh from the "amber torrents" of Scotland, would not pronounce the Trafalgar Square water, the analysis of which we have just sketched, to be "an unco fine liquid for purposes o' agricultural irrigation;" but in point of drinking excellence, as like the beau idéal of water as the dumb-waiters and soda-water bottles from which it issues, are like the beau idéal of sculpture—granting all this, and as much more as is required, there is one fatal objection against these Artesian wells—that the supply from them, even with the small demand as yet made on

them, has been steadily decreasing for the last twenty years and more ; that every fresh well draws away the water from the surrounding ones, and necessitates the deepening of them ; and that this fact is not merely owing to the opening the springs at a lower level, for, to quote Mr. Braithwaite's evidence, "there has been one universal depression in all the wells to the sand spring, varying only in degree according to the depth." This fact, we apprehend, needs no comment.

The same phenomenon gives rise to a fatal objection against all propositions for supplying London from deep wells sunk into the vast water-loaded fissures which undoubtedly exist in the chalk. Even now, the great Brewers who are supplied by chalk wells are compelled to pump on separate days to avoid exhausting the supply ; and the springs at Watford, twenty miles from London, are higher every Monday than during the rest of the week, owing to the pumping being discontinued on Sunday. Besides, these waters are of a degree of hardness, varying on an average up to nineteen degrees, which renders them utterly unfit either for washing or drinking.

The most obvious sources of supply are of course the Thames and its tributaries, and many projects have been started for diverting to London a stream which would certainly be inexhaustible, from some higher and therefore purer point on the Thames. Of these the most simple, feasible and economic, seems certainly to be that of Mr. Hawksley's scheme for establishing reservoirs and filters on the Thames bank, a little below Maidenhead, and thence conveying the water to Hampstead, from which point it would be distributed at high pressure over the whole of London ; and that of Mr. Quick, an eminent engineer, who proposes that the supply should be taken from Twickenham, about ten miles nearer the heart of London in a direct line, considering that there would be no advantage corresponding to the increased outlay obtained by taking it from a point higher up the river. The estimated cost of Mr. Hawksley's projects is £746,790, of Mr. Quick's £300,000. But the objection against both these, and all other similar ones, is the same as against the last mentioned. The water is too hard, varying from twelve to sixteen degrees, according to Dr. Clark's soap-test, and even granting that a perfect method of filtration could eliminate all the organic, as well as the mechanical impurities, neither of which are considerable, and that the water could, by aeration during filtration, be redeemed from its present flat and nauseous taste, still there would be on an average twelve grains of carbonate, and two of sulphate of lime to be got rid of.

It has been recently proposed to do this by applying the admirable process invented by Professor Clark of Aberdeen, which

is destined, doubtless, hereafter to come into extensive use. Professor Clark, in 1841, took out a patent for this invention, which consists in a very simple application of lime-water to water already containing bi-carbonate of lime, compelling it thereby to deposit the lime which it holds in solution. The whole of this learned gentleman's evidence as to the evil effects of hard water, and the complete and instantaneous improvement effected by his process, is exceedingly valuable, but all that we have space to notice is the treatment of his discovery by the various London water companies. In the delusive hope that they were as enlightened as himself, he sends round to them copies of his pamphlet, inviting them to inspect his process. Two of them return no answer; another cannot try it themselves, but recommend him to go to their large customers, and see if they would make the trial—and of course take the expense. Another promises polite attention—and so vanishes back into its native dirt. Another company informs him that, having reached perfection, the sending his pamphlet to them was quite needless. Another inspects the process, two years ago, and is not heard of again. Another expresses their opinion that the process could be worked much more economically—(to them?)—by consumers. And the West Middlesex, with its Thames paramécia and infusoria, and nineteen degrees of hardness, informed the astonished philosopher that their water had been “bright, pure, and salubrious for the last two years!”

But, in the mean time, a method of water-supply has been gradually extending itself throughout Scotland and the North of England, which bids fair to out-vie all others, from the peculiar simplicity of the process, which is, in fact, a mere organized copy of nature's own process of producing springs and rivulets, and from the great purity of the water which is obtained by it. It consists in collecting, over certain elevated gathering-grounds, the whole rain-fall of the district, whether from natural springs or from the artificial drainage of the soil, and conducting them down to reservoirs of a sufficient height to supply water at constant high-pressure. The water thus obtained, off the granite, greenstone, trap, and millstone-grit rocks of the north, varies from one and a half to five degrees of hardness, and, as many of our North British readers must be well aware, is as perfect in quality as can be desired. By this method the majority of cities and large towns of Scotland, and many in Lancashire, are enjoying those advantages of soft and well aerated water to which we have had already occasion to allude; for the pure rain of heaven, from which ultimately the greater part of all supplies must be derived, is thus intercepted in its passage downwards, and turned to use, before it has had time to become adulterated with any of

the numberless elements, organic and inorganic, which it must meet with in its passage downwards to the sea, or into the bowels of the earth.

The superiority of this method of supply has been, as it seems to us, so clearly demonstrated by the evidence laid before the Health of Towns' Commission, that it is not to be wondered at if those interested in the fate of the London supply cast about for some plan of applying it to the case before them.

The first point was to ascertain whether the neighbourhood of London offered a gathering-ground for pure water of a sufficient size; and such a one prescribed itself at once in the range of sterile moors known to geologists by the name of the Bagshot Sands. The upper portions of this district spread out in vast flats, clothed with a scanty brown heather, and fast increasing forests of Scotch fir, utterly uncultivable from their barrenness. These hills were within the last fifty years the haunts of red-deer; and the black cock still lingers on the sunny brows, the snipe and wild duck around the desolate pools; while the valleys which intersect the waste form a striking contrast to the dreary solitude above, by their noble timber trees, the crops of scanty, but peculiarly excellent wheat which clothe the slopes, and their boggy meadows, which furnish a coarse herbage for summer cattle. Travellers by the Southampton Railway must often have been surprised at finding themselves, within an hour's run of the greatest metropolis in the world, whirling through miles of desert; and even though they may have acquiesced in the popular notion that it is impossible to cultivate these wastes, they may yet have been inclined to suspect that so peculiar a district, in so peculiar a situation, may have still its use, and its part to play in the forward movements of civilisation, perhaps in relation to the very city on which it borders so nearly. We profess our honest belief that the Bagshot Sands, like everything else in the world, were not created in vain; that rabbits and plovers' eggs, unsaleable fir-poles, and the worst of turf, were not intended to be their final produce; and that even those upper gravel layers, which are absolutely beyond the hope of cultivation, at least till science has progressed for centuries more, possess by virtue of their very barrenness and utter flintiness, a wealth of their own, in the form of a pure, well aerated, and naturally filtered water, which no science can imitate or improve.

It appears, on the whole, that the existing springs of this district are sufficient to afford a daily supply of 40,000,000 of gallons, sufficient to give to 520,000 houses (double the number now in London) 75 gallons per house. The estimated expense of intercepting these waters at their sources, storing them in a reservoir on Wimbledon Common, and connecting them with

the present street pipeage, together with compensation to mill owners, &c., is £646,000, which, if paid off in 21 years, at 6 per cent., would amount, at the average of 280,000 houses, of little more than three shillings a house; while the present rate to the water companies on the same number of houses is about £1, 1s.

We may be perhaps allowed to enter somewhat into detail in our description of these proposed gathering grounds, likely not to become a subject of public interest and notoriety.

No district, perhaps, of South Britain, shews more distinctly the connexion between the outer clothing and the inner substance of mother earth, the strict coincidence between geological fact, and the features of landscape. The upper flats are composed principally of a pure brown sand, with a cap of diluvial gravel, the relics of primeval chalk, green sand, and weald hills, from which, by some mysterious agency, every atom of carbonate of lime has disappeared, leaving nothing behind but their skeleton of sharp flint and sand. The imagination reels at the thought of the stupendous masses of chalk which must have been destroyed, to furnish from their scantiest ingredient, millions of miles of gravel hills.—However, the destruction has taken place, and there the gravel beds lie, a natural filter, along the steep base of which innumerable crystal springs well out in a clearly defined horizontal line, and flow down over the more retentive loams and foliated clays of the middle Bagshot beds, which form the cultivated slopes of the valleys. Much of the rain which falls on the table lands, unable to escape at the surface level, descends to a greater depth, to reappear in the low meadows in the form of chalybeate springs, the presence of which, colouring all the rivers of the district, has engendered fears in various quarters of the general purity of the water. But as a fact, the springs of the upper level, from whence alone the supply need be drawn, are as free from iron as they are from every other contaminating element, organic or inorganic. In the course of ages, whatever hydrated oxide of iron has been diffused in a soluble state through the upper strata, has been washed down by the rains to the retentive beds below, and carried off by them into the valleys, to form an alluvium abounding with every conceivable salt of iron. To a similar process of filtration Mr. Prestwick, the geologist most intimately acquainted with the district, refers the entire absence of all carbonate of lime in the form of fossil shells throughout the upper sands; the hydrated protoxide of iron, in its progress downwards, having rendered whatever carbonate of lime it met soluble in water. Should this theory be correct, as we have no reason to doubt, it would seem that nature has not only provided the Londoners with a ready made filter, but has been kindly busy for ages preparing

it for them. Moreover, these Bagshot Sands have advantages which few even of the Scotch gathering grounds possess. There is no real peat on their surface, but only a few inches of black peaty soil, nine-tenths of it sharp sand; they require no drainage, the present volume of the springs being enough to supply a city far more populous than London is now—the mere act of clearing them out would considerably increase their volume—and the soil above them being uncultivated, there is no risk of contamination from the filtering downwards of manures.

The alternative lies evidently between this scheme and that of Mr. Hawksley or Mr. Quick. The Government will, we hope, be shortly called on to decide whether of the two can be carried out at least cost. The Bagshot plan promises at present to be dearer than the Twickenham and cheaper than the Maidenhead one; but it must be remembered, that to the estimated expense of these latter must be added the yet uncertain cost of Dr. Clark's softening process; and we must consider the labour of the manufacture, the risk of mistakes in applying it to so vast an amount of water daily, and the fact that it will not bring the Thames water down to within one and a half or two degrees of the natural average of Bagshot and Farnham water. No conclusion to which the Government can come can affect the engineering reputations of Mr. Hawksley and Mr. Quick, or throw discredit on Dr. Clark's invaluable discovery. There are towns and villages by the hundred to which his process of purification will be an invaluable boon. The time may come when landlords and corporations shall be compelled, in default of a natural supply of soft water, to produce an artificial one by this or analogous means. The time may come, too, when the ædile, with powers to inspect and compel the improvement of the houses, water, and sewage—and perhaps the agricultural drainage—of every district, shall be as integral a member of English as he was of Roman civilisation. But, in the meantime, it is evident that a bold step must be taken in the direction which we have been pointing out; and it is to be hoped that Her Majesty's Government will not be deterred by any cuckoo-cry of the press, still less by any jealousy of the energy and talents of its servants, from taking into its own hands the work which a selfish, divided, and careless public disdains to perform for itself—or rather, for its poorer members. These are days in which everything, even freedom and "our glorious constitution" themselves, must submit to be tried by the one test of practice. "Will it work?" asks the world of every man and matter: "If not—it must go:" And surely that free government incurs a heavy responsibility, which brings a slur by any tardiness of its own on those principles of liberty which are committed to its charge. We know that des-

potisms have been able to supply the masses fully and freely with necessities, like water, unattainable by their own efforts. If freedom is to hold its place in the respect of the masses, it must shew an equal, if not a superior power for the common good. The inhabitants of ancient Jerusalem were plentifully supplied with water both from reservoirs and pipes. Those of Rome had a gratuitous supply several times as great, in proportion to the population, as that which is considered necessary for London. The Peruvian Incas constructed aqueducts of 120 and 150 leagues in length. In Spain, both the Moors and Romans have left traces of their power in the form of enormous aqueducts and reservoirs to supply cities insignificant in comparison of London. The canals of Semiramis, and those of Egypt, are world-famous. Assyria and Mesopotamia are intersected by the ruins of vast water-courses; and through great part of the East, even at this day, the inhabitants are supplied with fresh and pure water by the beneficent will of their despots. Surely a free country ought to be able to do more, not less. It remains for England to shew that her boasted civilisation and liberty has a practical power of self-development, which can meet and satisfy the wants of an increasing population, and cleanse from her fair face such plague-spots as we have been—not describing, for too many of them are past description, but—hinting at, as delicately as the nature of the subject will allow. Unless some practical proof is given to the suffering masses who inhabit our courts and alleys—one single savage and heathen tribe of them, the costermongers, numbering according to Mr. Mayhew, thirty thousand souls—that a constitutional government can secure more palpable benefits to the many than a tyranny; unless anarchy ceases to be considered identical with freedom, and human beings to be sacrificed to a proposition in a yet infant and tentative science,—we must expect to see, in the course of events, a revulsion in favour of despotism, such as seized France when she raised Napoleon to the Empire; a revulsion which is more possible even in Britain, to judge by certain ugly signs on both extremes of the political horizon, than the pedants of “constitutionalism” are inclined to suppose.

And though these permitted evils should not avenge themselves by any political retribution, yet avenge themselves, if unredressed, they surely will. They affect masses too large, interests too serious, not to make themselves bitterly felt some day or other. “This is no question,” as Mr. Mill well says, “of political economy, but of general policy:” we should go farther and say—of common right and justice. Therefore it is that we make no apology for any foul details through which we have led our readers. We only wish that we could shew them the

realities, amid which thousands of their fellow-subjects are born and die. It is right that "one half of the world should know how the other half live." Neither do we apologize for having made use of severe expressions of condemnation. Such questions as these, involving not merely profits, but health, sobriety, decency, life, are to be judged of not by the code or in the language of the market, but of the Bible. Acts concerning them are not merely expedient or inexpedient, fortunate or unfortunate, but right or wrong; the wrong may be excused by ignorance, but a wrong, and therefore a self-avenging act, it remains till amended. Even the hard and soft water controversy is not a mere matter of soap and tea expenditure, but of humanity and morality. As Hood said of the slop-sellers, so we say of the hard-water-and-animalcule-sellers,—

"It's not trowsers and shirts you're wearing out;
It's human creatures' lives."

We may choose to look at the masses in the gross, as subjects for statistics—and of course, where possible, for profits. There is One above who knows every thirst, and ache, and sorrow, and temptation of each slattern, and gin-drinker, and street-boy. The day will come when He will require an account of these neglects of ours—not in the gross.

- ART. X.—1. *The Royal Supremacy not an Arbitrary Authority, but limited by the Laws of the Church of which Kings are Members.* By the Rev. E. B. PUSEY, D.D., Regius Professor of Hebrew, Canon of Christchurch. Part I. *Ancient Precedents.* Oxford, 1850.
2. *The Papal and Royal Supremacies contrasted. A Lecture delivered on Sunday the 12th of May 1850.* By the Right Rev. N. WISEMAN, D.D., Bishop of Melipotamus, V.A.L.
3. *The Queen or the Pope? the Question considered in its Political, Legal, and Religious Aspects.* By SAMUEL WARREN, Esq., of the Inner Temple. 1851.

THE true Popish doctrine upon the subject of the relation that ought to subsist between the Church and the State, or between the ecclesiastical and the civil authorities, is, that the ecclesiastical power is superior, in point of jurisdiction, to the civil. This is the view which has been held by the generality of Romanists except the defenders of the Gallican Liberties, and it accords most fully with the general principles and spirit of the Church of Rome. The opposite extreme to this is, of course, the doctrine of the superiority of the civil power to the ecclesiastical. This doctrine is often called by continental writers Byzantinism, a name suggested by the unwarrantable control generally exercised by the Emperors of the East over the patriarchs of Constantinople and the Greek Church during the middle ages, while in this country it is usually known by the name of Erastianism. The golden mean between these two extremes, is the doctrine that the Church and the State are two distinct societies, independent of each other, each having its own separate functions and objects and its separate means of executing and accomplishing them, each supreme in its own province, and neither having jurisdiction, or a right of authoritative control, over the other. This we believe to be the doctrine of the Sacred Scriptures upon the subject. The defenders of the Gallican Liberties in the Romish Church of France, and the old Scottish Presbyterians, were led most fully to develop this doctrine, and it is now held by all the non-established churches in this country.

The chief difference among the non-established churches, in regard to this matter, turns upon these two questions—1st, Does the denial to the State of any jurisdiction or authoritative control over the Church, involve or imply a denial, that the State is entitled and bound to exercise *its proper authority in its own province*, with a view to promote the welfare and extension of

the Church? and, 2d, Does the independence of the Church as a distinct society, with the Church's obligation to maintain this, necessarily preclude it from entering into a friendly union or alliance with the State? The advocates of what is commonly called the Voluntary principle, answer these two questions, which are virtually and substantially one, in the affirmative, while the advocates of what is usually called the Establishment principle, answer them in the negative. Both parties, however, concur in holding the entire independence of the Church and the State as two distinct societies, and in denying to either any superiority, in point of authority or jurisdiction, over the other; while, on the points on which they differ, the advocates of the Establishment principle undertake to prove, that an obligation lies upon the State to aim, in the exercise of its proper authority in civil matters, at the welfare of true religion, and that there is no consideration which necessarily and universally precludes the Church from entering into friendly union with the State, and of course treating and arranging with it about the terms on which mutual co-operation may take place.

No sooner had the civil authorities made a profession of Christianity, than we find indications of their assuming to themselves jurisdiction in ecclesiastical matters, and encroaching upon the Church's province. Before the end of the fourth century, the Church was obliged to pass canons prohibiting the clergy from applying to the civil power in order, by its interference, to secure or to retain their ecclesiastical status and privileges, canons identical in their substance and objects with the law passed by the Church of Scotland, in 1582, against Mr. Robert Montgomery, when, in defiance of the Church, he attempted to intrude, on the nomination of the king, and by the aid of the secular power, into the archbishopric of Glasgow. The encroachments of the civil power led to a setting forth of the fundamental principle of the independence of the Church upon the State, and of the supremacy of each in its own province, and we find this principle very fully and accurately stated by some of the popes, and other leading ecclesiastical authorities, in the fifth and sixth centuries. This important doctrine, however, did not obtain permanent practical ascendancy; for, during the middle ages, the Eastern Church lost all its rights and liberties, and sunk into a condition of abject slavery to the civil rulers, while the Western Church, by the marvellous skill and unscrupulous dexterity of the popes, succeeded, to a large extent, not only in obtaining exemption from civil control in civil matters, but in securing supremacy over the civil power. The principle of the superiority of the civil over the ecclesiastical was established in the East, while that of the superiority of the ecclesiastical over the civil,

was established in the West. Both these principles are opposed to the Sacred Scriptures, and both, in their practical results, operated injuriously to the interests of religion, and to the general welfare of the community.

At the Reformation, the civil authorities who espoused the Protestant cause, were called upon to repel the encroachments which the Church of Rome had made in many ways upon the secular province, and to assert to the full their own legitimate power. This tended again to lead them to assume too much to themselves in regard to ecclesiastical matters, and to make encroachments upon the Church's province, a tendency which some of the Reformers did not a little to countenance. In most of the Reformed Churches, accordingly, the rightful independence of the Church was more or less encroached upon, and the civil powers practised an extent of interference with ecclesiastical matters, which Scriptural views of the duties and functions of the Church and of the State do certainly not sanction. There is good ground to believe that Luther and Melancthon became at last sensible that they had erred in conceding too much power to the civil authorities in the regulation of ecclesiastical matters, but they could not repair the evil they had done, as their rulers were not disposed to abandon any portion of the power they had acquired. Calvin, whose comprehensive and penetrating intellect raised him far above all even of his great cotemporaries in the discovery and establishment of truth, promulgated from the first sound views in regard to the right mutual relation of the civil and the ecclesiastical authorities, but he did not succeed in getting these views practically adopted in all the Churches which embraced, in the main, his system both of theology and church government. Of all Protestant countries, that in which the Scriptural independence of the Church was most strenuously maintained in argument, and most fully realized in practice, was Scotland, and that in which the civil power secured the largest share of unwarranted authority in the regulation of ecclesiastical affairs, was England. The ecclesiastical supremacy of the Crown in England, the transference at the Reformation to the sovereign of the authority which had formerly been enjoyed by the Pope, a result which the old Scottish Presbyterians used to denounce as implying a change in the Pope but not in the popedom, has always been regarded as a peculiarity of the Anglican Church, and has given rise to a good deal of discussion. It is exciting much interest in the present day in consequence of the peculiar views held upon the subject by the Tractarians, especially as these have been developed in connection with the Gorham case; and it has also been brought largely to bear upon the exciting topic of the recent Papal Aggression.

In these circumstances, it may not be uninteresting to our readers to have their attention directed to this subject of the ecclesiastical supremacy of the Crown in England, the relation in which it stands to the place which the civil power ought to hold in the regulation of ecclesiastical affairs, and some of the practical applications which have recently been made of it.

The origin in fact of the ecclesiastical supremacy of the Crown in England, was the determination of Henry VIII. to be Pope as well as Sovereign in his own dominions, to possess and exercise the power in ecclesiastical matters which the Pope had formerly enjoyed; and he certainly succeeded in getting the Parliament to sanction the whole extent of ecclesiastical jurisdiction which he was pleased to claim. Henry was very vain of his ecclesiastical supremacy, and in the year 1545, near the end of his life, he had a medal struck, bearing his likeness, in which he is described, in Hebrew, Greek, and Latin, as "Under Christ the Supreme Head of the Church of England and Ireland." * Attempts have been made, (the most full and elaborate is to be found, we believe, in the Fifth Part of Sir Edward Coke's Reports,) to prove, that the laws of Henry and Elizabeth in regard to the ecclesiastical supremacy of the Crown, were fully warranted by the legal enactments which were in force before the Reformation, directed to the object of checking the assumptions of the Papal See. But it is by no means clear that this position has been established. The ante-Reformation enactments referred to, seem to have been intended rather to guard the liberties and independence of the nation and of the subjects in general against papal encroachments, than to vest anything like ecclesiastical jurisdiction in the Crown. Certainly, no king had ever before claimed the title of Head of the Church, or maintained the principle, that "all manner of jurisdiction, ecclesiastical as well as secular, flows from the Crown." It is common for those who wish to put the best face upon the proceedings of Henry in these matters, and upon the conduct of the Church of England in submitting to them, to allege, that, in connexion with the famous Act of Submission, the clergy only consented to acknowledge the King's title as Head of the Church, and the supremacy which it implied, thus far, *quantum per Christi legem licet*. But it is certain, that we have the express testimony of Archbishop Parker, that, though the clergy struggled hard to have this qualifying clause introduced, as a relief to their con-

* Dr. Hickes, in his *Treatises on the Christian Priesthood*, gives a fac-simile of this medal from Evelyn's *Numismata*, and then adds:—"I never yet heard any man talk of this medal, but who made this observation, namely, that King Henry crucified the Church, as Pilate did the Saviour, with the solemnity of three superscriptions."—Vol. ii. p. 81.

sciences, the King would not agree to this, and that they at last consented to its omission.* In the reign of Queen Mary, the ecclesiastical supremacy of the Crown was abolished, as inconsistent with Popish principles, just as it was abolished by the Scottish Parliament, in 1690, as inconsistent with Presbyterian principles. It was restored, however, in its whole substance, and with the mere omission of the title of Headship, on the accession of Queen Elizabeth, and as so restored it continues to this day to be the recognised law of the land.

It is somewhat difficult to form a definite and precise idea of what is really implied in the ecclesiastical supremacy of the Crown, as established by law in England. Lawyers and divines usually represent it in somewhat different aspects. The divines, of course, have usually been anxious to explain it away, that it might seem to be not palpably inconsistent with the rights and liberties of the Church of Christ,—although there have not been wanting eminent writers among the clergy, so utterly destitute of all right idea of what a church of Christ is, as to be willing to defend the supremacy in the widest sense which the most Erastian lawyers have assigned to it. The generality of the divines of the Church of England, have objected to our judging of what the Church is responsible for in this matter, by the phraseology of Acts of Parliament, or by the dicta of lawyers, and have insisted that we must try her only by what she herself has said upon the subject. We are not sure that justice demands this concession in all its extent, as it seems quite fair to hold the Church responsible for the substance at least of all those enactments and regulations, by which the civil power has virtually determined the conditions on which the Church holds the temporal privileges which have been conferred upon her, and to which she practically consents, by accommodating to them her own procedure in the ordinary administration of ecclesiastical affairs. But, as we do not mean to enter into legal investigations, we shall advert chiefly to the Church's own declarations upon the subject, viewed in connexion, however, with the actual practice which invariably obtains.

The chief of these are to be found in the Thirty-nine Articles, and in the Canons of 1603,—the only canons which are in force in the Church of England. The thirty-seventh Article is this:—“The Queen's Majesty hath the chief power in this realm of England, and other her dominions, unto whom the government of all Estates of this realm, whether they be ecclesiastical or civil, in all causes, doth appertain, and is not, nor ought to be, subject to any foreign jurisdiction. When we attribute to the Queen's

* Parker *De Antiquitate Britannicæ Ecclesiæ*, p. 326. Hanovix, 1605.

Majesty the chief government, by which titles we understand the minds of some slanderous folks to be offended, we give not our princes the ministering either of God's Word, or of the Sacraments, the which thing the Injunctions also lately set forth by Elizabeth our Queen, do most plainly testify, but that only prerogative which we see to have been given to all godly princes in Holy Scriptures by God himself, that they should rule all estates and degrees committed to their charge by God, whether they be ecclesiastical or temporal, and restrain with the civil sword the stubborn and evil-doers." The second of the Canons of 1603 is:—"Whosoever shall affirm that the King's Majesty hath not the same authority in causes ecclesiastical that the godly kings had among the Jews, and the Christian emperors of the primitive Church, or impeach any part of his regal supremacy in the said causes, restored to the Crown, and by the laws of this realm therein established, let him be excommunicated *ipso facto*." The thirty-sixth Canon provides that no person shall be admitted into any ecclesiastical function, unless he shall subscribe the following article:—"That the King's Majesty under God is the only supreme governor of this realm, and of all other his Highness's dominions and countries, as well in all spiritual or ecclesiastical things or causes as temporal, and that no foreign prince, person, prelate, state, or potentate, hath, or ought to have, any jurisdiction, power, superiority, pre-eminence, or authority, ecclesiastical or spiritual, within His Majesty's said realms, dominions, and countries."

It is plain that these statements are exceedingly vague and unsatisfactory, viewed as expositions of what this *chief government* or *supremacy* means, with the exception of the reference in the second Canon to the laws of the realm as determining it; and, accordingly, there has been a considerable diversity of opinion among the divines of the Church of England, as to what is involved in the supremacy, and a great deal of confusion and inconsistency in the grounds on which it has been defended. Some High-churchmen have explained it very much away, so as, while still professing to adhere to the Articles and the Canons, to approach very near to Scriptural views of the liberty and independence which the Church of Christ ought to enjoy, while some Low-churchmen have received and defended it in such a sense, as practically to reduce the Church to the level of a mere department of the ordinary functions and business of the State.

It cannot be disputed that these declarations recognise, as rightly vested in the Crown, or the civil magistrate, the highest or ultimate jurisdiction, or right of authoritative control, in all ecclesiastical causes, *without any limitation* of the extent or the effect to which he may decide them, as distinguished from the extent or the

effect to which he may decide civil causes. The only limitation or appearance of limitation, imposed upon the ecclesiastical supremacy of the Crown, is that the sovereign is excluded from the administration of God's Word and the sacraments; and this in itself is insufficient to save the claim from the imputation of what is usually regarded and spoken of as Erastianism. Erastus himself, indeed, held that civil magistrates might lawfully preach and administer the sacraments, if their other duties allowed them leisure for this. But few of those who have been called after his name have gone so far. They have usually admitted that there is a distinction of functions between the civil and the ecclesiastical authorities, *i.e.*, that there are some ecclesiastical processes which the civil magistrate cannot himself perform, while they have usually denied, more or less explicitly, that there is a distinction of governments or jurisdictions, *i.e.*, they have held that in all ecclesiastical causes which require to be judicially or forensically decided, the civil power has supreme and ultimate jurisdiction. The Church of England asserts a distinction of functions between the civil and the ecclesiastical authorities; but she does not assert, and by plain enough implication she denies, as Erastians have usually done, a distinction of governments or jurisdictions. This becomes the more evident when the thirty-seventh Article of the Church of England is compared with the corresponding portion of the Westminster Confession, which is sanctioned by law as the confession of the Church of Scotland, and is generally received by Scottish Presbyterians. The Westminster Confession says (Ch. xxiii.) that "the civil magistrate may not assume to himself the administration of the Word and the sacraments, *or the power of the keys of the kingdom of heaven.*" According to the general usage of divines, the power of the keys might have comprehended the administration of the Word and sacraments, but when distinguished from this, as it evidently is in the extract we have quoted, it describes the judicial decision of all questions or causes that arise in the ordinary administration of ecclesiastical affairs, especially such as concern the admission of particular individuals to office or to ordinances in the Church, and this the Church of England has not, either in theory or in practice, denied to the civil magistrate.

Presbyterians while fully admitting the supremacy of the Crown over all persons ecclesiastical as well as civil, in opposition to the Popish principle of the exemption of ecclesiastics, have usually refused to admit that this supremacy extends to all ecclesiastical causes, as this in all fair construction implies, unless expressly limited, an ascription of proper jurisdiction to the civil magistrate in the decision of religious questions, an admis-

sion of the superiority of the civil over the ecclesiastical power, inconsistent with the rightful liberty and independence of the Church as established by Scripture. High-churchmen, who see and admit that the Church of Christ, as a distinct and independent society, has rights and liberties which ought not to be sacrificed or compromised, usually maintain that they do not ascribe to the Crown, or to any parties acting in its name and by its authority, jurisdiction to the same extent or to the same effect in ecclesiastical as in civil causes; and when called upon to explain what kind or degree of jurisdiction they do ascribe to the Crown, they usually say that the civil power is entitled to exercise jurisdiction in ecclesiastical causes only in a civil way, or with reference to the civil matters that may be involved in or mixed up with them. *This is the only view by which the ascription of any authority to the Crown in ecclesiastical causes can be vindicated from the charge of Erastianism, or of a sacrifice of the Scriptural independence of the Church.* The distinction on which it is based we admit to be true and real in itself, though we must contend that, to say the least, it has no countenance from the Articles or Canons. Civil things, questions of property, even though involved in or mixed up with ecclesiastical causes, belong in their own nature to the province of the civil magistrate, and should of course be determined by the ordinary civil tribunals, except in so far as it has been legally provided, by mutual agreement between the Church and the State, that they are to follow the sentences of the ecclesiastical tribunals, pronounced upon the ecclesiastical departments of the causes in which they are involved. There is no necessary violation of the essential independence of the Church, in the civil power reserving to its own tribunals the decision of all questions which directly concern the persons and the property of men, *provided* the Church is left at full liberty to give effect to her own judgment and decision with respect to what may be properly ecclesiastical in the cause, that is, to take an illustration from the class of cases that ordinarily occur, provided she is left at full liberty to refuse to admit to offices or ordinances in the Church, all whom she regards as unfit or unworthy, in whatever way this refusal may affect questions of property. In this sense, and with these limitations, there is a civil supremacy in ecclesiastical causes, which may be lawfully ascribed to the civil magistrate, without necessarily interfering with the Church's liberty and independence. But so far as the Church of England is concerned, it is only Tractarians and High-churchmen who seem to have knowledge enough of these subjects to understand and employ the distinction, and though they thus indicate an approximation to some sound notions of what a Church of Christ

is, they are unable to shew that the distinction has been sanctioned either by Church or State, and, of course, they are unable to defend by means of it their own position as ministers of the Church of England.

This distinction, to which the Tractarians are now so fond of having recourse, is in substance the same as that which was employed by the old Presbyterian writers in Scotland and Holland, who defended the independence of the Church against the Erastian encroachments of the civil power, when they ascribed to the civil magistrate authority *circa sacra*, but denied to him all jurisdiction *in sacris*. It was on the same ground that the Puritans in Queen Elizabeth's days were generally willing to subscribe the terms of the 37th Article, though they openly and strenuously objected to the ecclesiastical supremacy of the Crown *as established by law*, and to the constitution of the Church of England generally, as implying an approbation of the legal provisions connected with this subject.* Even the old Scottish Presbyterians, who were at once more intelligent and more rigid than any other body of men in their time, on all the points involved in the question as to the right relation between the civil and the ecclesiastical authorities, admitted that there was a sense in which a supremacy in ecclesiastical causes might be ascribed to the Crown, although they refused to make a profession in these terms, unless it were accompanied with a formal and recognised explanation of the sense in which they understood them. Some very interesting notices upon this subject are to be found in Wodrow's History of the Sufferings of the Church of Scotland, b. i. c. iii. sect. 4 and 5. Upon the restoration of Charles II., some of the Presbyterian ministers were willing to take the oath of supremacy, provided they were allowed to accompany it with this explanation, "that the King's sovereignty reacheth all persons and all causes as well ecclesiastic as civil, having them both for its object, *albeit it be in its own nature only civil and extrinsic in regard to causes ecclesiastical.*" This expla-

* This appears clearly from the ground taken on both sides in the celebrated controversy between Archbishop Whitgift and Cartwright. That this held true also at a later period, see Hickman's *Apologia pro Ministris Nonconformistis*, published in 1664, pp. 141-44. This state of matters gave some little appearance of truth to a statement of a celebrated Jesuit, Becanus, made in the time of James VI. He alleged that there were three parties in England on the subject of the King's ecclesiastical supremacy; 1st, the Episcopalians who believed it and swore to it; 2d, the Puritans who did not believe it, but who swore to it; and, 3d, the Catholics, who neither believed it nor swore to it. *Dissidium Anglicanum de Primatu Regis*, 1612, p. 55. There are some very interesting materials, bringing out fully what were the views of the Puritans upon this subject in the reign of Queen Elizabeth, and proving that they were then openly avowed and well known, collected in Bishop Madox's *Vindication of the Church of England*, in reply to Neal's History of the Puritans.—C. IV. pp. 180-295.

nation was reckoned by the Privy Council a refusal of the oath, and as the ministers refused to take the oath, unless this explanation were accepted, they were deprived and banished. Their conduct on this occasion affords conclusive evidence at once of their intelligent acquaintance with the subject, and of their moderation and conscientiousness, and on these grounds it presents a favourable contrast with that of all the different sections or parties in the Church of England.

We believe it to be impossible to collect from the writings of the divines of the Church of England any precise or definite ideas of the nature and extent of the supremacy in ecclesiastical causes, which they ascribe to the Crown. They often write about it, like men who neither know what they say nor whereof they affirm. Many of them present the unpleasant aspect of men who are obliged to defend a point to which they are committed, and which they cannot abandon, but which they are half-conscious is really untenable. The vacillation and confusion exhibited by the defenders of the ecclesiastical supremacy of the Crown, have given a great advantage to their opponents in the controversy, whether Presbyterians or Papists. The work of the Jesuit Becanus, mentioned in a preceding note, was directed to the object of exposing this, and he certainly does shew that a great deal of confusion and inconsistency was exhibited upon this subject, by the divines who discussed it in the controversy occasioned by the imposition of the oath of supremacy by King James on Romanists after the Gunpowder Plot. No one acquainted with the writings of English divines in defence of the ecclesiastical supremacy of the Crown, will have any hesitation, unless he be one of themselves, in assenting to the accuracy of the description given of them by Calderwood, in his able and learned work entitled, *Altare Damascenum*, in which he makes a full and elaborate exposure of the system of Church government obtruded by King James upon Scotland after his accession to the throne of England. Calderwood's statement upon the point is this :—" Qui primatus regii jura discere voluerit ex hierarchicorum contra pontificios scriptis polemicis, nihil certi reperiet. Nam vel andabatarum more inter se dimicant, vel de facto potius exempla quorundam Imperatorum a recta norma sæpius deflectentium congerunt, quam de jure argumenta proferunt."—(C. I. p. 27.)

The reference in the Canons to the godly kings of Judah and to the first Christian emperors, seems to have been intended both as a proof, generally, of the lawfulness of the ecclesiastical supremacy of the Crown, and as an indication of the extent of authority implied in it. But the materials referred to are quite insufficient for either of these purposes. The interferences in re-

ligious matters of the kings of Judah, cannot of themselves afford a satisfactory argument in favour of the ecclesiastical supremacy of the Crown, because, in so far as they seem to involve any thing beyond what all but the advocates of Voluntaryism concede to the civil magistrate, they are manifestly occasional, isolated, and peculiar in their character and circumstances; and, because, for anything that can be proved to the contrary, they may be explained by the principle, that they took place under special divine guidance and direction, and not in the exercise of the ordinary right of sovereignty—that they are to be referred rather to the prophetic, than to the kingly office. And even if it were conceded for the sake of argument, that they give some countenance to the general idea of an extent of interference on the part of the civil power in religious matters, such as has been regarded by many as Erastian, they would still be of no avail to defend the specific provisions implied in the ecclesiastical supremacy of the Crown, as it is settled by law in England. It is mere folly to refer to the proceedings of the early Christian emperors as affording either a warrant or a model for the exercise of the supremacy. Their actings carry with them neither legal nor moral weight; they were evidently based upon no principle but that of assuming as much power in Church matters as they found it practicable or convenient to exercise; and taken complexly and in the mass, they do not constitute a definite and well-digested system of interference in ecclesiastical affairs. In short, those who object to the ecclesiastical supremacy of the Crown, attach no more weight to the proceedings of the early Christian emperors, than to those which form directly and immediately the subject of controversy, viz., the actings and enactments of Henry and his daughter Elizabeth.

There is no possibility, then, of forming any definite conception of the nature and extent of the jurisdiction implied in the ecclesiastical supremacy of the Crown, from a reference to the first standard indicated in the second Canon, viz., the godly kings among the Jews and the Christian emperors of the primitive Church, and it is absolutely necessary to have recourse to another standard which is there also indicated and recognised, where it denounces excommunication against all who “impeach any part of the royal supremacy in ecclesiastical causes, restored to the Crown, and by the laws of this realm therein established.” We are thus warranted and obliged to have recourse to laws, lawyers, and ordinary established practice, though it is fair, at the same time, to have regard to any thing which High-church divines may have adduced to explain or modify the conclusions which lawyers may have adopted. We do not remember to have met in any author, whether lawyer or divine, a fuller, a more precise, or a

more accurate description of what is implied in the ecclesiastical supremacy of the Crown, than is contained in the following extract from the famous sermon preached by Archbishop Bancroft, at Paul's Cross in 1588 :—" In this supremacy, (as established at the Reformation), these principal points were contained, that the king hath ordinary authority in causes ecclesiastical, that he is the chiefest in the decision and determination of Church causes, that he hath ordinary authority for making all laws, ceremonies, and constitutions of the Church, that without his authority no such laws, ceremonies, or constitutions, are, or ought to be of force ; and, lastly, that all appellations, which before were made to Rome, should ever be made hereafter to His Majesty's Chancery, to be ended and determined, as the manner now is, by Delegates."* There can be no reasonable doubt that this remarkable statement of Bancroft's is a correct representation of what was generally admitted to be involved in the ecclesiastical supremacy of the Crown, by those divines who defended it during the reign of Queen Elizabeth against its popish and puritan assailants. It seems very plain, we think, that all this is fully warranted by the laws of the land applicable to the subject, and by the ordinary practice which has obtained under their authority. And it is pretty certain that the canons of 1603, *which were prepared under Bancroft's superintendence*, were intended to direct the sentence of excommunication against all who should impeach any part of *this*.

The main points involved in the ecclesiastical supremacy are these—1st, That no synod or convocation professing to represent the Church, or to possess ecclesiastical authority, can assemble or transact any business without the sovereign's express permission previously accorded, and that no rules they may adopt, and no decisions they may pronounce, are valid or binding *to any effect or upon any party*, without his subsequent consent or approbation ; and, 2d, that the ultimate appeal in ecclesiastical causes, including all questions that may arise about the admission of particular individuals to benefices and to ordinances, though they may involve points of faith, charges of heresy, is to the king in Chancery. Both these positions are established by the Act of Submission, the 25th of Henry VIII., c. 19, and by a uniform and consistent course of practice following thereon, and we know of no grounds on which it can be denied with any plausibility, that they form an essential part of the constitution of the Church of England, that that Church has given her consent to these arrangements as a part of the terms or conditions on which

* Bibliotheca Scriptorum Ecclesiae Anglicanae 1709, p. 291. This is a reprint in a collected form of "Tracts relating to the government and authority of the Church." It was evidently published under High Church auspices.

she enjoys her emoluments and privileges as an establishment, and that she is bound to take the responsibility of defending them, and of proving, if she can, that they involve nothing inconsistent with the scriptural rights and liberties of a Church of Christ. An attempt was made by Bishop Atterbury, and some other High-churchmen, in the reign of Queen Anne, to prove that the sovereign was as much bound to call a convocation from time to time, as to call a parliament, and to allow them to proceed to transact business. But they were defeated in argument, that is, upon the ground of the constitution and law of England, by Archbishop Wake and the Low-churchmen, and the matter was settled practically by the authority of the Crown, which has never since allowed the convocation to transact any business whatever. The Act of Submission provides that "for lack of justice in the Archbishop's courts, the party may appeal to the king in Chancery," who is further authorized to appoint under the great seal commissioners or delegates to decide finally on the appeal. This was the origin and foundation of the court of Delegates referred to in the quotation from Archbishop Bancroft, which continued to exercise its functions, as occasion required, till a few years ago, when, by Act of Parliament, they were transferred to a committee of the Privy Council. This involved no change of principle whatever, as the Sovereign was entitled to constitute the Court of Delegates, for trying appeals from the Archbishop's Courts, of any persons whom he chose to select. So that upon the footing of the constitution, the Church of England has no ground to complain of the existing tribunal for deciding finally in all ecclesiastical causes, and no right to refuse obedience to its judgments, unless indeed she choose to face the responsibility of abandoning her emoluments and privileges as an establishment. The case of Mr. Gorham came, in the first instance, before the Bishop of Exeter, as judge ordinary of the diocese, who judicially refused to grant him Institution and Induction, on the ground that he was a heretic. It then came, by appeal, before Sir H. J. Fust, as *Official Principal of the Archbishop, the Metropolitan of the Province*, who confirmed the Bishop's sentence. It was then carried by appeal, according to the undoubted provision of the constitution, to the Queen in Chancery, and as a committee of the Privy Council had been legally substituted in room of the Court of Delegates, which had been accustomed to exercise this department of the jurisdiction of the Crown, the case was finally disposed of by that body, who reversed the judgment of the ecclesiastical authorities, and decided, in opposition to the Bishop and to the Archbishop's Official, that Mr. Gorham was not a heretic, and that he must have Institution and Induction, which he has accordingly obtained.

This, then, being the authority which the civil power possesses and exercises over the Church of England, this being what the Church has accepted and consented to, the great question is—Has the State, in this matter, usurped a power or authority which does not rightfully belong to it? Has the Church of England become a consenting party to an arrangement which involves an unwarrantable compromise of her independence—of her rights and liberties as a Church of Christ? In accordance with the principles which have been always held by Scottish Presbyterians, we can have no hesitation in answering these questions in the affirmative. We are persuaded, on these principles, that the authority thus conferred by the Legislature upon the Crown, is an encroachment of the State upon the Church's province, and that the Church, in consenting to it, is guilty of a dereliction of duty, and abandons rights and liberties which, upon scriptural principles, she was bound to have maintained. The opposite view can be defended only upon the principle of the superiority, in point of jurisdiction, of the civil power over the ecclesiastical; a principle which has been generally regarded by the Churches of Christ as an Erastian extreme, opposite to that which is held by the Church of Rome. The truth or falsehood of both these extremes depends essentially upon the settlement of this question—Whether the Church and the State be two distinct independent societies, having distinct ends and objects, and distinct constitutions and laws for the regulation of their affairs. If this question be answered in the affirmative, as it plainly should be, then any superiority in point of jurisdiction of the one over the other, is excluded, unless direct and specific proof of a peculiarly clear and conclusive kind can be adduced from Scripture, in support of the alleged superiority. Now no proof can be adduced from Scripture, or from any other quarter, in support of the alleged right of the Church to exercise proper authority, direct or indirect, in temporal matters, or of the alleged right of the State to exercise proper authority, direct or indirect, in ecclesiastical matters. The Church and the State are two distinct independent societies; and each has its own province. If they enter into a friendly union or alliance for mutual assistance and co-operation, they may arrange the terms and conditions of this alliance according to their own convictions of what is right. But they should do this as two co-equal independent powers, having no authority over each other. And after they have done this, their original and essential independence should be still asserted and maintained, to be acted upon if any unwarrantable encroachments should be attempted by either of them. It is true, indeed, that there is no unwarrantable usurpation on

the part of the civil power, when it gives the sanction of law, with a view to civil and legal effects, to what may have been agreed on between the parties, respecting the faith, government, and worship of the Church, and that there is no sacrifice of the Church's independence in her pledging herself to adhere to the faith, government, and worship which have been agreed upon, and which she believes to be scriptural, so as to be tied up from making any change without the consent of the State, except, of course, in the way of falling back upon her original and essential independence, and renouncing any advantages she may have derived from her State connexion. But still the Church and the State have their distinct provinces, and each is supreme and independent in its own province. And there is no great difficulty—no such difficulty as is often alleged by those who are afraid to think and speak with clearness and discrimination upon this subject, in settling the boundaries of these provinces. The province of the State, the sphere in which the civil power is entitled to exercise proper authority, *so as to impose a valid obligation to obedience*, comprehends only the persons and the property of men, and does not comprehend the Church of Christ. Civil rulers may be, we believe they are, bound to employ their legitimate authority in civil things—their lawful authority over the persons and the property of men—their right to make national laws and to regulate national measures, in such a way as to promote, so far as they can, the welfare of religion, and the prosperity of the Church of Christ. But this does not imply or confer any proper authority, any right of jurisdiction, in religious matters, or within the Church's province, and does not warrant them to interfere authoritatively in the regulation of ecclesiastical affairs. The province of the Church comprehends all those processes which may be said to constitute the ordinary necessary business of a Church of Christ, and which ought to be going on wherever a Church of Christ exists and is in full operation. Over these processes the civil power has no jurisdiction, or right of authoritative control. The Church is bound to conduct them all according to the revealed will of her master, and her own conscientious convictions, and cannot lawfully be a consenting party to any arrangements which prevent her from doing this.

A fair application of these plain principles, will enable us to judge, without much difficulty, in each case of a union or alliance subsisting between Church and State, whether the respective rights and functions of the two parties have been rightly adjusted—whether the line has been accurately drawn and maintained between the civil and the ecclesiastical provinces. The union between Church and State in Scotland, as settled at the Revolution, and

guaranteed by the Treaty of Union, was in substantial accordance with these sound principles, and continued to be so until the recent interferences of the civil power, which produced the Disruption, and led to the formation of the Free Church. But the matter was not accurately adjusted in England. There, we think, the civil power has plainly encroached upon the proper province of the Church, and interfered with her rightful independence. Henry VIII. was determined to be Head of the Church as well as Sovereign of the State, and to this hour his wishes, and his success in gratifying them, determine the relation subsisting between the civil and ecclesiastical authorities. It seems plainly necessary to the liberty and independence of a Church, that it shall have power to meet and deliberate about the execution of its own appropriate functions, the performance of its own necessary business. And this general principle applies universally to a Church, whether it be regarded as consisting of a single congregation or of many congregations associated together, and, if of many, whether they are associated under a Presbyterian or under a Prelatic government. A Church may have to submit to the want of this right of meeting and deliberating, when subjected to persecution, and oppressed by open violence, but cannot lawfully become a consenting party to this deprivation, as she thereby renounces a right which her Master has conferred upon her, and incapacitates herself for the discharge of duties which he has imposed upon her. Any power which may attempt to deprive a Church of this right, she should regard as a tyrant and oppressor, and if emoluments and advantages are offered in compensation, she should look upon them as the price of her liberty. This right of meeting to deliberate and decide upon ecclesiastical questions, formed one of the chief subjects of contention between the civil and the ecclesiastical authorities in Scotland, when King James was labouring to reduce the Church to a state of subjection to civil control, and the Church never ceased to strive until she obtained the full sanction of the Legislature to the right of the General Assembly to meet every year for disposing freely of all ecclesiastical affairs. The Protestant Church of England has never possessed, and indeed can scarcely be said to have ever claimed, a right to meet and decide on ecclesiastical subjects. No body acting in her name and entitled to represent her, has been allowed to assemble for more than a century, and this is a state of matters altogether unworthy of a Church of Christ, and implying that her independence as such, or the rights and liberties properly attaching to that character, have been taken away from her.

It is of course to be presumed, and is no doubt true in fact, that the Church of England conscientiously approved of the

arrangements in regard to doctrine, government, and worship, which have been sanctioned by the Legislature, and that she would never have submitted to have had *these* forced upon her against her will, or unless she had really believed them to be in accordance with the Sacred Scriptures. But the preaching of the word, the public worship of God, and the administration of sacraments, do not constitute the whole of the functions of a Church of Christ, do not exhaust the processes which must be going on wherever a Church is in full operation. In addition to all these, there still remains the administration of the ordinary government of the Church as a distinct society, including especially the decision of controversies that may arise on religious subjects, and the determination of any questions that may be raised about the admission of particular individuals to the exercise of ecclesiastical functions, or to the enjoyment of ecclesiastical privileges, to the cure of souls, or to the sacraments. The process of admitting men individually to the cure of souls and to the sacraments, or excluding them as occasion may require, must be ever going on where a Church of Christ is in operation. And the question that is raised upon this point is,—should these processes be *finally* determined by the Church herself, or by the ecclesiastical authorities, according to their own conscientious judgment of what is right and scriptural? or has the civil power a right of interfering authoritatively in the determination of them, and may the ecclesiastical authorities sanction the exercise of this right, and submit to decisions upon such questions pronounced by civil functionaries, acting in the name of the Sovereign, even when these decisions are in their judgment erroneous? If the civil magistrate has no proper jurisdiction in ecclesiastical matters, then decisions upon such questions pronounced by civil functionaries, acting in the Queen's name, proceed *a non habente potestatem*, and of course have no power to bind the conscience, and are not, upon general principles, entitled to obedience. The Church by acknowledging this right in the civil power, sanctions an unlawful intrusion into her own province, and consents to abandon the liberty or independence which her Master has conferred upon her. So the matter stands upon the footing of the Scriptural principles by which this subject ought to be regulated, but so it does not stand upon the footing of the constitution of the Church of England. By the civil or legal constitution of the Church of Scotland, before the occurrence of the recent proceedings which led to the Disruption, the State expressly recognised the General Assembly, the supreme ecclesiastical tribunal, as entitled to adjudicate *finally* on all such questions, while the constitution of the Church of England deprives the ecclesiastical authorities of a right of final judgment,

and authorizes an appeal for ultimate decision to the Queen in Chancery. In the Gorham case, the last decision pronounced by an ecclesiastical tribunal was that of Sir H. J. Fust, the official principal of the Archbishop, and even this was the decision of an ecclesiastical tribunal, that of the Archbishop of the province, only by a sort of fiction of law; but after *all* the authorities who could be called in any sense *ecclesiastical*, had pronounced upon it, it was taken for *final* judgment to a tribunal purely and palpably civil, constituted by the Queen, acting in her name, and exercising a jurisdiction which by Statute belongs to the Sovereign. And the effect of this final decision by a purely civil tribunal, was to invest Mr. Gorham not only with the benefice, but with the spiritual office, with the cure of souls, though *all* the ecclesiastical authorities who had adjudicated upon his case, had pronounced him a heretic.

On these grounds, we hold that the ecclesiastical supremacy of the Crown, as established by law in England, is an unwarrantable usurpation of the civil over the ecclesiastical power, and is inconsistent with the independent right of self-government which the Church of Christ, and every branch or section of it, ought to enjoy, and is bound, so far as it can, to maintain. And when we attend to the grounds on which it has been defended, we can discover little else but obscurity and confusion. It has been the great misfortune of the Church of England, that its constitution and arrangements, except in so far as concerns the fundamentals of its public profession as a Christian Church, on which, of course, no honest men could submit to a compromise, have to some extent owed their origin to adventitious circumstances and extraneous influences, rather than to a deliberate and impartial examination of the intrinsic merits of the case, and of the principles by which it ought to be regulated. The Liturgy, it is understood, was to some extent regulated, as to its character and contents, by a desire to please Romanists, and to retain them in communion, and this object is said to have been effected, during a few years, in the beginning of Elizabeth's reign. But this temporary and unworthy advantage has been far more than compensated by the mischief of a Romanizing faction arising at different periods within her pale, and finding in this same Liturgy some plausible countenance for their fundamental principles. There are not a few provisions which enter into the constitution of the Church of England, that were originally rather submitted to than approved of by the Church herself, or by those who represented her in her ecclesiastical character. It is well known that the most eminent and influential churchmen of the early part of Elizabeth's reign, desired a more thorough reformation, especially in the matter of ceremonies, than they were able to

effect, and that if they had been allowed to regulate the Church's constitution in the way they thought most accordant with Scripture and reason, some of those things would have been omitted, which afterwards contributed largely to produce the Puritan controversy, and which, when attacked, subsequent generations of ecclesiastics have defended, as if they were most excellent and important in themselves,—as if they were the Church's palladium. The case is somewhat similar in regard to the ecclesiastical supremacy of the Crown. Henry and Elizabeth claimed and assumed it. It was very congenial to the minds of politicians and lawyers, though not likely to be quite so palatable to ecclesiastics. But the Church submitted and consented to it, and her divines have therefore been obliged, though in many cases with evident signs of discomfort and reluctance, to defend it as well as they could.

The course that has been pursued in explaining and defending this topic, has been determined chiefly by the comparative soundness and accuracy of the conceptions entertained by different individuals and parties, as to the constitution and character of the Church, as a distinct society, of divine institution, subject to the authority of Christ, and bound to be regulated in all things by the standard of His Word. Those of them who identify the Church with its benefices, who regard the Church merely as a moral police, or as a department of the ordinary business of the State directed to the promotion of the peace and general welfare of the community, find, of course, in mere Acts of Parliament sufficient warrant for all that they need to maintain, and never think of looking higher. The nearer their views have approximated to scriptural conceptions of what a Church of Christ is and should be, the more anxious have they been to explain away the ecclesiastical supremacy of the Crown, and the greater difficulty have they felt in defending it as it is by law established. The High-churchmen usually contend that the "chief government" of the Crown in ecclesiastical causes is a mere civil supremacy, bearing only on what is civil in these causes, on their temporal elements and consequences; and vindicate this on the principle, that the civil power is entitled to assume a general inspection, superintendence, and control of all things that take place within its dominions, with the view of protecting men's civil rights, and preventing the frustration of the great ends of civil society. This general principle is undoubtedly a sound one, and in this sense, and to this extent, it cannot be disputed, that not only the Church of Christ as a society, but even the conscience of individuals, is subject to the superintendence and control of the supreme civil power. But this principle, though true and sound in itself, has evidently no real application to the ecclesiastical supremacy of the Crown, as exhibited both by law

and practice in England. That supremacy manifestly involves the assumption and exercise of proper jurisdiction, or authoritative control, not merely *circa sacra* but *in sacris*, the imposition of a restraint upon the essential liberty and independence of the Church as a distinct society, having the power of self-government, which includes the right of finally and fully disposing of all questions, the determination of which forms an integral part of the Church's ordinary necessary business. Accordingly, very few Church-of-England men have ventured explicitly and unequivocally to take this ground of defence; for though it is right in itself, and if tenable by them, would leave room for professing scriptural views with respect to the Church's independence, it is plainly precluded by an impartial investigation of the actual constitution of the Church of England. The Low-churchmen, who usually admit that the ecclesiastical supremacy of the Crown does involve the exercise of proper ecclesiastical jurisdiction, are equally perplexed and confused in their attempts to defend it, because, though their position is plainly right when tried by the standard of the constitution of the Church of England, it is manifestly wrong when tried by the standard of scriptural views of what a Church of Christ is, and of what are the principles by which the administration of its affairs ought to be regulated.

In consequence of these difficulties and cross-currents of thought and influence, the writings of most Anglican divines upon this subject are miserably defective in laying down consistent and definite principles, and commonly exhibit a mass of vagueness and evasion, of obscurity and confusion. We scarcely know of any eminent divine of the Church of England who has fairly and manfully faced the task of giving a formal and detailed exposition of the relation that ought to subsist between the Church and the State, with a defence of its different provisions, except Warburton, in his Alliance; and here, certainly, the exception confirms the rule. Warburton fully admits the original and natural independence of the two societies, the Church and the State; but he contends that, when they enter into an alliance with each other, the independence of the Church must be sacrificed. He has not proved that the formation of an alliance between them necessarily requires this, and he has scarcely attempted to prove, that it is lawful for the State to reduce the Church to subjection, or for the Church to consent to this. The second of these points ought to have been proved as well as the first, because, though it were established that an alliance between Church and State necessarily involved the sacrifice of the Church's original and natural independence, yet unless it were further shewn that this sacrifice was lawful, the only conclusion resulting would be, that no alliance could be legitimately formed. But having got over this great step of the

sacrifice of the Church's independence, to his own satisfaction, Warburton proceeds to deduce in detail, professedly upon theoretical and abstract grounds, the terms or conditions on which the alliance ought to be formed; and he brings out, as the result of his abstract speculations about what is right and good, just the very terms on which the alliance is actually formed between Church and State in England, such as the appointment of bishops and other dignitaries by the Crown, the prevention or restraint of ecclesiastical synods, and the ultimate decision, upon appeal, of ecclesiastical causes by a civil tribunal. And then he holds it up as a most striking proof of the excellence of the constitution of the Church of England, that it should so *wonderfully* coincide with what he had demonstrated by *pure abstract reasoning* to be the right adjustment, while it is pretty plain that, during the whole course of his professedly abstract argumentation, he had the Church of England in his eye, and was predetermined to bring out a vindication of its constitution.

Most of the other Anglican divines, in discussing this subject, just take things as they find them, and endeavour to put the best face they can upon them, varying in the accuracy and fairness with which they bring out what the ecclesiastical supremacy of the Crown really involves, and in the boldness and manliness with which they defend it, according as they have or have not something like scriptural views of what a Church of Christ is, and of what are the principles, the standard, and the rules, by which its affairs ought to be regulated.

In the reign of Queen Elizabeth the Episcopalian divines had to defend the ecclesiastical supremacy against the assaults both of Papists and Puritans, Horne and Bilson, bishops of Winchester, and Nowell, dean of St. Paul's, being the chief opponents of the former class, and Whitgift and Hooker of the latter. The Puritan cause was ably defended at this period by Cartwright and Travers. The next era in this controversy in England was the discussion occasioned by the imposition of the oath of supremacy on Papists after the Gunpowder Plot. This discussion turned chiefly upon the Supremacy of the Pope, especially in its bearing upon temporal things, but it took in also the supremacy of the Crown, and the writings of Bellarmine and Becanus on the one side, and of King James and Bishop Andrews on the other, contain a good deal of interesting matter. When High-church views of the relation between Church and State began to prevail under Laud's influence, they were zealously attacked by Prynne, the celebrated anti-Episcopalian lawyer, who conducted the opposition upon the lowest Erastian grounds, and thus became involved in controversy also with his Presbyterian friends. It was at this time, and in consequence of the peculiar form which the contro-

versy assumed, as conducted between Prynne and the faction of Laud, that Bishop Sanderson wrote his work entitled "Episcopacy as established by law in England not prejudicial to royal power." He has certainly established his position, but it was scarcely worth while to spend so much labour in demonstrating a truism. There was not much discussion upon this subject, between the Restoration and the Revolution. One work of considerable value, however, was published during this period, in 1685—"Of the subject of Church power," by the Rev. Simon Lowth. This work is written in a very uncouth style, but it contains a good deal of important matter in opposition to the Erastianism of Grotius, Hobbes, and Selden, and in defence of the opinions and position of Anglican High-churchmen. It was followed by a valuable supplement, published in 1716, entitled "The independent power of the Church not Romish, but primitive and Catholic." But perhaps the most important and interesting department of this controversy in England, was that which was connected with the discussion of the views and position of the Nonjurors after the Revolution. We cannot enter into any details upon this subject; we can merely state that the leading Nonjurors, in maintaining the unlawfulness of the deprivation by Act of Parliament of the bishops who refused to take the oaths to William and Mary, put forth sounder views of the independence of the Church than had ever before been held by Church of England divines—views in substance the same as those which have been maintained by the Tractarians in our own day. The principal works of the Nonjurors in which these opinions were advocated, are "Leslie's case of the Regale and the Pontificate," published in 1700; "Dodwell's *Paraenesis de Nupero Schismate Anglicano*," in 1704; and "Hickes's Treatises on the Christian Priesthood, and the Dignity of the Episcopal order," in 1707, and his "Collection of Papers on the Constitution of the Catholic Church," in 1716.

It was a very common thing for the defenders of the ecclesiastical supremacy of the Crown, especially in the reign of Elizabeth, to endeavour to supply their lack of satisfactory argument upon the proper merits of the case, by a liberal use of the *argumentum ad invidiam*, in the way of enlarging upon the fact of the concurrence of the Papists and the Puritans or Presbyterians upon this subject, and holding up this fact as affording a strong presumption that the opposition made to the supremacy was unfounded. As it has continued down to the present day to be a favourite expedient of the opponents of the independent authority of the Church within its own province, or its power of self-government, to represent this doctrine as Popish, and as the history of Tractarianism may seem to give some countenance to

the allegation, it may be proper to make a few observations upon it.

It is quite true, that in so far as concerns mere opposition to the ecclesiastical supremacy of the Crown as established by law in England, or a mere negation of the general principle on which it is based, viz., that the civil magistrate is entitled to exercise jurisdiction or authoritative control in ecclesiastical matters, Papists and Presbyterians are of one mind. The grounds, too, on which they rest their opposition, are, of course, in substance the same, viz. these—1st, that the Sacred Scriptures afford no sanction to the assumption of such jurisdiction by the civil power; and, 2d, that the Scriptural views of the functions, privileges, and duties of the Christian Church, of its relation to Christ and to his Word, preclude it. Thus far Presbyterians agree with Papists, but no further, and in agreeing with them thus far, they are supported by the concurrence of the primitive Church, the leading Reformers, and all the existing Churches of Christ throughout the world, except those which, having tamely yielded to civil control, are called upon to try to defend the lawfulness of their actual position. The Church of Rome has retained a great Scriptural truth in asserting the independence of the Church of Christ of all authoritative civil control, and her retention of this truth affords no reason why other Churches should abandon it. It is true that the Church of Rome has grossly corrupted this doctrine, as she has corrupted every other portion of Scriptural truth the profession of which she has retained. While Romish writers often talk, in conformity with primitive usage, of the independence of the Church upon the civil power, as if they meant merely to assert the truth of the Church's right of self-government, the real doctrine of the Church of Rome upon the subject is, as we have explained, the superiority of the Church over the State. From this doctrine she has deduced these important practical conclusions—1st, that the Church has jurisdiction, at least indirectly, and in *ordine ad spiritualia*, in civil affairs; and, 2d, that ecclesiastical persons should be exempted from the jurisdiction of the ordinary State tribunals even in civil and criminal matters; just as the Erastian defenders of the royal supremacy have deduced from *their* principle of the superiority of the civil over the ecclesiastical, the conclusions, 1st, that the Crown is the final judge in the decision of ecclesiastical causes; and, 2d, that the sovereign, being the head of the Church, cannot be lawfully excommunicated. The true Scriptural Presbyterian doctrine of the mutual independence of the Church and the State as two distinct societies, and the principle involved in this doctrine, viz., that of a co-ordination of powers with a mutual subordination of persons, not only afford no coun-

tenance to the distinctive tenets and practices of the Church of Rome, but positively exclude both Popish and Erastian extremes. It is then an entire misrepresentation to hold up the Presbyterian doctrine, as to the relation that ought to subsist between the civil and the ecclesiastical authorities, as identical with that of the Church of Rome. The Presbyterian doctrine not only does not involve, but it does not admit of, the assumption of any control by the Church over the State; and it not only does not countenance, but it precludes, the exemption of any ecclesiastical persons or of any civil questions from the jurisdiction of the civil power. Nations and States have no ground to be jealous or afraid of Presbyterian, but much of Popish, principles on this subject. Indeed, we do not know that a more ample and emphatic testimony has ever been rendered to the principle of the supremacy of the civil power in all civil matters, than was given by those who now form the Free Church of Scotland, at the Disruption of the Scottish Establishment in 1843. Their conduct upon that occasion proved, that they held that principle thoroughly and honestly, in all its extent and with conscientious conviction, and that they were anxious to pay to it the utmost deference. The peculiarity in their position which imparted this character to their testimony was this, that they believed and maintained, undertook to prove and did prove, that the interferences of the civil courts in ecclesiastical matters, to which they could not render obedience, were violations of the constitution and law of Scotland, infractions of the Revolution settlement and of the Treaty of Union, that not the Church but the State had violated the established conditions of the union between them, and that of course the Church still had a moral right, upon constitutional and legal grounds, to her civil privileges and emoluments, notwithstanding all she had done. And yet, in these circumstances, with this opinion honestly held, openly maintained, and conclusively proved, they, when refused redress by the Legislature, deferred to the supremacy of the existing civil power in civil matters, by voluntarily resigning all the civil privileges and emoluments which had been conferred upon them.

Not only, however, is there a clear and broad line of demarcation between the Presbyterian and Popish systems as to the relation that ought to subsist between the civil and the ecclesiastical authorities, but the independence of the Church, as it has been usually asserted by English High-churchmen, is a very different thing from what Presbyterians have ever contended for. High-churchmen are, of course, deeply tainted with the Popish element, with the sacramental and the hierarchical principles, while they are hampered on the other side by their acknowledgment of the ecclesiastical supremacy of the

Crown. These opposing influences have usually communicated a good deal of confusion and inconsistency to their expositions of this subject. Still it must be admitted, that some of the leading Nonjurors did bring out with considerable fulness and clearness the doctrine of the independence of the Church, as involving a denial of all civil jurisdiction in ecclesiastical matters. They had, like their modern representatives, the Tractarians, a bitter hatred of everything Calvinistic and Presbyterian, but they admitted that on this subject they adopted the Presbyterian principle. Dr. Hicke says—"What I have written here on the principle of independency for the Church's rights, is agreeable to what all parties in religion profess and practise, particularly in our neighbouring kingdom (Scotland), where, though they are right in the principle, they have no right to apply it against the secular power *for want of Succession and Mission, without which they have neither priesthood nor Church. But, God be praised, we have both*, and it is *their* sacred and independent rights we defend against the invasions of the lay power."* This statement, while asserting a general identity of principle between High-church and Presbyterian views of the independence of the Church, indicates also, plainly enough, that there is a difference, and what it is. According to High-church views, the independence of the Church is a right that belongs only to the *clergy*, and belongs to them in virtue of their proper priesthood, derived from apostolic succession, whereas every notion and claim of this sort Presbyterians utterly repudiate. The High-church principle is the exclusive and lordly domination of a privileged caste, claiming control over the conscience, in virtue of a divine authority communicated to them to give or withhold the necessary means of eternal life. These are the views of Church power, and of the priesthood of the clergy on which it is based, that are held by High-churchmen, and they are plainly popish in their whole substance and foundation, in their whole spirit and tendency. They are explicitly asserted, and fully developed in the writings of the leading Nonjurors—Leslie, Dodwell, and Hicke, and they have been distinctly taught by the Tractarians of our own day. The Presbyterian principle, on the contrary, is merely a reasonable power of self-government vested in the Church, and in every section or branch of the Church, as a distinct society, limited or conditioned by the necessity of scriptural warrant for all that is done or imposed, and by the right of private judgment, which is freely conceded to all, to be exercised upon their own responsibility. Presbyterians assign important rights, with reference to the exercise of the power of self-government, to all the

* Constitution of the Catholic Church, p. 128.

members of the society, especially the right of electing all their own office-bearers; and though they think that the ordinary administration of the affairs of the Church is vested in the office-bearers, they do not restrict this right of ruling to the clergy, but extend it equally to the elders, who, though not technically laymen, because ordained to their office, are engaged in all the ordinary duties and occupations of secular life, and fairly represent the society at large. They do not ascribe to ecclesiastical office-bearers, whether clergymen or elders, any priestly function or authority whatever. High-church views as to the nature of the priestly office, and the functions and authority which belong to it, amount to a virtual claim on behalf of the clergy to infallibility, and to a power to save or to condemn. They thus effectually provide for trampling down the right of private judgment, under the crushing weight of Church authority. On all these points, the independence of the Church, as advocated by High-churchmen, differs essentially from the same principle as held by Presbyterians, though in both cases it excludes the jurisdiction of the civil power. It should also, in addition, be remembered, that as the doctrine of High-churchmen about the independence of the Church, as based upon and deduced from the priestly functions and authority of the clergy, is evidently derived from the Church of Rome, so they have sometimes shewn a considerable leaning towards the Popish principles of the jurisdiction of the Church in temporal matters, and the exemption of ecclesiastics from ordinary civil control, though they have scarcely ventured to bring out these notions openly and formally.

The Tractarians of our day have embraced and promulgated the substance of the views held by the old Nonjurors upon this subject, and it is probable that the decision in the Gorham case will now lead to a fuller discussion and development of them. Soon after the decision of that case by a Committee of the Privy Council, above 1800 clergymen of the Church of England subscribed a solemn protest condemning the judgment, not only as erroneous, but as incompetent, because involving the exercise of civil authority in determining an ecclesiastical question. Dr. Pusey's work, the title of which we have prefixed to this Article, is intended to defend this important step, though, so far as yet published, it contains scarcely any general argument, and is filled with "ancient precedents," that is, the actual interferences in ecclesiastical matters of "the Christian Emperors of the primitive Church" referred to in the second Canon. These High-churchmen have not yet given any indication of any practical steps by which they mean to follow up their protest, and we certainly do not expect much from them, or, indeed, from any party in the Church of England, in the way of energetic and

combined action upon grounds of public principle. We do not meddle at present with the soundness of the decision in the Gorham case with reference to its own proper merits, that is, with the question, whether or not Mr. Gorham had taught any such error as ought to have shut him out from a benefice and a cure of souls in the Church of England. But there can, we think, be no doubt that the decision was pronounced by a competent authority, that is, by the tribunal, which, according to the recognised constitution of the Church of England, was entitled to pronounce it. We agree with Dr. Pusey and his friends in thinking it to be wrong in itself, and degrading to the Church, that a civil tribunal should possess the supreme or ultimate jurisdiction in a case of this sort. But while this state of matters is wrong scripturally, it is certainly right according to the constitution of the Church of England. We have referred to the proof of this already, and need not now repeat it. We cannot see that there is any room for a difference of opinion upon this point. The Church must have known that this provision as to the ultimate disposal of ecclesiastical causes, was a part of her legal constitution, a term or condition on which she enjoyed the privileges and emoluments, which, as an Establishment, she derived from the State. She must be held to have consented to this arrangement, and so must every clergyman who is in the enjoyment of a benefice. If the Church of England should ever come to entertain Scriptural views upon the subject of the constitution of a Church of Christ, and the relation that ought to subsist between the Church and the State, she would see at once the unwarrantableness of the legal arrangements to which she has hitherto consented, she would forthwith go to the civil power and ask that these arrangements should be altered, and brought into conformity with sound principles, and, if she failed in this, she would have no alternative but to renounce her privileges and emoluments as an Establishment. As to the individual clergymen who have protested against the decision of the Privy Council as incompetent, it is quite plain that, by the 2d Canon, they have incurred the penalty of excommunication *ipso facto*. We do not know how these sentences of excommunication *ipso facto*, which the Canons deal about so liberally, are to be enforced, but as there can be no doubt that in this case the penalty has been incurred, by "impeaching a part of the royal supremacy as established by the laws of the realm," surely the two Archbishops could and should do something for carrying the sentence into effect; and they might in this way, perhaps, if they had courage enough, get quit of these men, who on other and higher grounds are manifestly unworthy to hold office in any Protestant Church.

There is an important difference between the position of the clergy of the Church of England, in reference to the Gorham case, and that of those who formed the majority of the Church of Scotland, and who now form the Free Church, in reference to their collision with the civil courts. It is this: that every clergyman of the Church of England knew, or ought to have known, when he entered it, that the established constitutional provision for deciding finally in ecclesiastical causes, after they had been tried by the Bishop and the Archbishop, was by an appeal to the Queen in Chancery; whereas the interferences of the civil courts, which led to the Disruption of the Scottish Establishment, were unauthorized, unprecedented, unexpected,—such as the Church had no ground to anticipate from anything contained in any statute, from any dictum of any institutional writer, or from anything implied in any decision which had ever before been pronounced by the civil courts in similar questions. When the Bishop of Exeter pronounced a sentence refusing to institute Mr. Gorham on the ground of alleged heresy, he knew quite well that the established provision for ultimately deciding this question, contained in the constitution to which he must be held in all fair construction to have consented, and under which he enjoyed his status and emoluments as a Prelate of the Establishment, was an appeal to the Privy Council. Upon this ground he, and all other clergymen of the Established Church, are precluded, in common honesty, from complaining of the sentence as incompetent, however erroneous and dangerous they may reckon it, and have no fair alternative but submission, unless, indeed, they choose to renounce the civil privileges and emoluments of a constitution to which they have consented, but to which they can no longer render obedience. It is of some importance to notice this difference between the position of the Church of England and that of the Church of Scotland previous to the Disruption, for it affords materials which warrant a condemnation of those ministers of the Church of England who protest against the decision of the Privy Council as incompetent, and a vindication of the Church of Scotland in refusing, even in her character as an Establishment, to submit to the decisions of the Court of Session in ecclesiastical causes.

From the views we have taken of this subject, it will be inferred that, in reference to the recent Papal Aggression, which has awakened so much interest in our land, we do not attach much weight to the objection against the Pope's proceedings, that they interfere with the ecclesiastical supremacy of the Crown. It is so; but, at the same time, we are firmly persuaded, that there are perfectly sufficient grounds to justify the strong and almost

universal feeling which the Papal Aggression has called forth, and to make it the imperative duty of the British nation to resent and to repel it. The ecclesiastical supremacy of the Crown is not sanctioned by law in Scotland, and never has been so, since the laws of Charles II. establishing it, were annulled by the first Act of the Scottish Parliament in 1690. And, even in regard to England, the royal supremacy cannot be held to be, in the full and proper sense of the expression, the law of the land ; because, in whatever terms the old statutes upon the subject may be expressed, the introduction of the principle of toleration must be held to have virtually restricted their force and application to the Established Church. English Nonconformists, we presume, are no more called upon, in virtue of any obligation attaching to them as British subjects, to acknowledge and submit to the ecclesiastical supremacy of the Crown than Scotchmen are. We rejoice in the strong and general feeling of indignation which the Papal Aggression has called forth, and have a sanguine hope that this feeling, if rightly guided and directed, will issue in most beneficial results to the welfare of the empire, and the interests of truth and righteousness. Of course, we have no objection to any of our fellow Protestants vindicating their feelings and conduct in this matter, upon any ground which approves itself to their own minds. But we claim the same liberty for ourselves ; and, besides, we think it very desirable that any national measures which may be adopted should be based upon national grounds—upon grounds in which the whole of the true and honest Protestantism of the empire may be reasonably expected to concur. We have not space to discuss this subject of the Papal Aggression, but we would like to state our views upon it in a few sentences.

The recent Papal Aggression consists of two parts—1st, The appointment of a Cardinal to reside in this country, and to discharge at the same time ordinary archiepiscopal functions ; and, 2d, The introduction of a fully organized hierarchy, including Bishops with territorial titles, instead of Vicars Apostolic, or Bishops *in partibus infidelium* as they are called, and of the whole system of the canon law. The motives in which this aggression originated, were a conviction on the part of his Holiness that Popery had of late made such progress in Great Britain, that he was warranted in his treating this country as one of the territories of the Roman obedience, and a determination to adopt the means best fitted to bring the whole population of Great Britain under his sway. And the question is—How should such an aggression, coming from such a quarter, originating in such motives, and directed to such ends, be regarded and treated by the British nation ? We assume, in considering this question, that Protestants, the great majority of the British nation, regard

Popery as a bad thing, and as a formidable thing. If they are honest in their Protestant profession, they must regard Popery as injurious both to the temporal and the spiritual welfare of mankind—to the best interests of individuals, families, and communities; and if they are intelligent in their Protestant profession, they must regard Popery as a formidable foe, and as now growing, and not unlikely to continue to grow, in strength and influence, in its bearing both upon the mind of individuals and upon the regulation of political affairs. A profession of contempt for Popery, as if nothing was to be apprehended from it, may be fairly regarded, in existing circumstances, as traceable either to ignorance and stupidity, or to affectation and treachery; and, however excusable such a profession may have been in former times, it is now wholly out of the question in the case of any honest and intelligent Protestant. Popery is not to be despised, either in its theological or in its political bearings; and perhaps the most palpable and compendious proof that could be given of this, is the undoubted fact, that at this moment, in France and Austria, countries so widely different in many important respects which might be supposed to affect such a result, Popery and the Papacy have much more influence both on individual conviction and on political action, than they have had for more than a century. Upon these grounds, we think it could be easily shewn that it was right and reasonable, that the recent Papal Aggression should excite the attention of the British nation, should call forth strong feeling, and should lead to decided action—a conclusion powerfully confirmed by every view which history suggests, of the peculiar character and tendencies of Popery, of the objects it aims at, and of the means it employs to accomplish its ends. Assuming, upon these grounds, that action is imperatively called for, the next question is—What should that action be? In answer to this question, we submit the following observations, which we can merely state, without enlarging upon them:—

First, That since this Papal Aggression is symptomatic of the increase of Popery amongst us, an increase already in some measure effected, and likely to go on, it should stir up all Protestants and Protestant Churches to more united, systematic, and vigorous efforts, in the use of all lawful and appropriate means, to check the progress of Popery, by preserving Protestants from embracing it, and by rescuing Papists from its errors and delusions. This is at once the most unquestionable and the most important duty which the Papal Aggression imposes upon British Protestants. It is to be discharged by combined, energetic, and persevering exertions, on the part of all Protestants and all Protestant Churches, in the way of pressing upon the attention of the whole community scriptural views of Protestantism and of

Popery. As to the imperative obligation of this mode of action, in existing circumstances, there is scarcely room for a difference of opinion among honest Protestants; and its paramount importance, we trust, will not be overlooked amid more exciting but temporary subjects of interest.

Second, That the proximate causes which have tended more immediately to produce this increase of Popery, and to encourage the Pope to attempt this aggression, should be ascertained and dealt with. There is no difficulty in ascertaining some of these causes; and perhaps the most obvious and influential are the positive encouragement that has been given by successive Governments to Popery, both at home and in the Colonies, and the prevalence of Tractarianism, issuing in Popery, in the Universities and Church of England. Let these two things, then, be dealt with, and let a remedy be applied. With respect to the first of them, there is no difficulty, at least theoretically and in argument. It is the clear and imperative duty of the British nation to withdraw at once all the positive encouragement that has been given of late to Popery, both at home and abroad, in the way of endowments, titles of honour, and special privileges, and to reduce the Church of Rome amongst us to the condition of other tolerated sects. We have no wish to infringe upon the principles of toleration even in the case of Popery, or to deprive our Popish countrymen of the ordinary rights and privileges of British subjects; but the Protestant nation of Britain is bound to see to it, that she gives to Popery nothing more than toleration, and that she does not incur the guilt of positively aiding and encouraging it, of affording it means and facilities for advancing its objects. As to the way in which the Universities and Church of England should be dealt with, this is a more difficult practical question; but there can, we think, be no doubt that the British nation is entitled and bound to insist, that some effectual measures shall be taken to secure that these important national institutions shall not continue to be nurseries for the Church of Rome.

Third, That the aggression itself should, if possible, be directly resented and repelled. Under the two former heads we have considered the Papal Aggression rather indirectly, as a symptom or consequence of other things, and as suggesting measures wider and more comprehensive than its own immediate sphere of operation. But in addition to all this, we think it can be easily shewn, that everything in the character and history of our adversary, and everything in the circumstances of the attack which he has made upon us, concur in proving, that the aggression in itself should, if possible, be directly met and resisted. We have said, *if possible*, because it might have been, that the aggression had been managed with so much caution and cunning, that it

could not be directly grappled with and repelled *by any national act*, without trenching upon sound principles and incurring greater evils, and that we must on this account have been contented with the more indirect, though intrinsically much more important, measures, suggested under the two former heads. Having a strong conviction, founded upon every consideration which the character and history of Popery suggest, of the expediency of directly dealing with and repelling this Papal Aggression, if it be at all warrantable and practicable to do so, we are heartily glad that we can see our way to this being done by the nation, without trenching upon any principles which we are called upon to respect. The aggression itself consists, as we have said, of two parts. 1st, The appointment of a Cardinal to reside amongst us, and, 2nd, the appointment of Popish Bishops with territorial titles; and, of course, the process by which this aggression is to be directly resented and repelled, is, that the British nation should expel the Cardinal from the country, and should prohibit the assumption of these titles. There are many very powerful reasons why we should do these two things. Are there any sufficient grounds to prevent us from doing them? This is the true *status questionis*, and when considered in this light it is easily solved.

The residence of a Cardinal amongst us is wholly unnecessary for any of the spiritual functions, any of the ecclesiastical arrangements, of the Church of Rome, and therefore the fullest religious toleration does not require that he should be tolerated. This appointment was a gratuitous and wanton insult to the British sovereign and nation, and as such it ought to be resented. A Cardinal is a prince of the Romish Church, the highest functionary in the Court of Rome, a sworn privy-councillor of the Pope, not only as the head of the Church, but as a temporal sovereign. Cardinal Bellarmine informs us (*De Clericis*, lib. i., c. xvi.) that one main cause which led to the establishment and elevation of the Cardinalate was the increase of business at the Court of Rome, *especially after the Popes acquired temporal sovereignty*, under Pepin and Charlemagne, and the general description which he gives of their "Eminences" is that they are "the electors, the councillors, and the coadjutors of the Supreme Pontiff." When King James in his controversy with Bellarmine, complained that he had not been treated with the respect due to his royal dignity, the Cardinal replied, that the Pope was superior in rank and dignity to all monarchs, that Cardinals, being next to him, were on a level with crowned heads, and that he therefore was James's equal, (*Apologia pro Responsione ad librum Jacobi Magnæ Britanniae Regis*, c. iv.) In the authorized *Caeremoniale* of the Church of Rome, (lib. i.,

sect. 3,) it is laid down that in all public processions and entertainments, kings are to take rank along with the Cardinal Bishops, that these two classes are to be intermingled with each other, one of each following regularly in succession, and that the sons and brothers of kings are to take rank in like manner with the Cardinal deacons. There is then a special provision, that if the eldest son and heir-apparent of a king be present, he is not to be admitted among the Cardinal Bishops, but to take rank among the Cardinal priests. This intermediate position is that held by Dr. Wiseman, who is thus placed upon a level in point of rank with the Prince of Wales, and above all the other members of the royal family. It is quite plain that a man holding the office of privy-councillor to the Pope, and bound by the obligations attaching to that office, can have no right to the privileges of a British subject, and can have no claim to be allowed to live in this country unless he comes as the accredited ambassador of his own Sovereign ; and that too is impracticable in this case, for by the Diplomatic Relations Bill as it passed the House of Lords, it was provided that the Pope should not be allowed to send an ecclesiastic as his representative. There is no valid objection, then, to giving Cardinal Wiseman the alternative of renouncing his office, or of quitting the country ; and, on the contrary, such a procedure would be fully warranted by the recognised principles applicable to the ordinary regulation of such matters.*

That a prohibition of the assumption by bishops of territorial titles, involves nothing inconsistent with full religious toleration, is quite evident from the nature of the case, and from the fact that the assumption was an innovation, never formerly thought necessary for Romanists in England. From some statistics which we met with lately in a Popish periodical, it appears that of about 1350 bishops throughout the world subject to the Pope, all in the full execution of the functions of the Episcopate, *one-third* were Vicars Apostolic, without territorial titles derived from the places where they labour. This assumption of ter-

* A curious combination of circumstances once produced a formal and elaborate probation, that a Cardinal in virtue of his office was disqualified for being *Sovereign* of Great Britain. When Cardinal York, the grandson of James VII., became by the death of his brother the legitimate heir to the British Crown, the Scotch Episcopalians thought this a good opportunity of escaping from the penal restrictions to which they had been hitherto subjected, because of their refusal of the oath of allegiance ; and while they professed that they would have acknowledged him as king of Great Britain, if he had renounced his official subjection to the Pope, they maintained that his retention of his official position disqualified him for the Crown, and freed them from all obligation to acknowledge him as their Sovereign. See *Reasons for the Scotch Episcopal Clergy submitting to the Royal Family of Hanover*, by Bishop Abernethy Drummond. Edinburgh, 1792.

territorial titles was introduced amongst us for two reasons—1st, to be a public proclamation to the world, that England was now again subjected to the Roman obedience, like Italy and Spain, and that the Pope was entitled to parcel out its counties to be “governed” by his creatures; and, 2d, to pave the way for the full application of the canon law to Great Britain. It is the undeniable right, and the imperative duty of the Sovereign and the nation of Great Britain, to throw back this insult, to contradict this falsehood, to trample upon this claim, by prohibiting and annihilating the act by which the insult is conveyed, the falsehood is asserted, and the claim is advanced. The *substance* of the canon law is thus given by Luther in his defence of his conduct in publicly burning it, *Papa est Deus in terris, superior omnibus, celestibus et terrenis, spiritualibus et secularibus. Et omnia papae sunt propria, cui nemo audeat dicere, quid facis?*—(Tom. ii. p. 334.) It is certainly nothing more than a necessary act of self-defence—a just protection to Romanists as well as Protestants—to resist a measure *avowedly* directed to the introduction of such a system as this.

There is no difficulty, then, in point of principle, in the British nation directly repelling the Papal Aggression, by expelling the Cardinal and prohibiting the assumption of territorial titles. The only consideration that can be plausibly advanced against this mode of action, is that it would elevate into importance a man and an act, which might be, with equal safety and more dignity, disregarded. But the man, insignificant as he may be individually, is the representative and the agent of the Papacy in this country, and is himself the main author and cause of the insulting aggression; and the act, however paltry in itself, is one by which the Pope assumes and exercises jurisdiction over Great Britain, as if it were a country wholly subject to his control. Upon these grounds, it becomes not only warrantable but imperative, to bring to bear upon *this man and this act*, all those powerful considerations which demonstrate, that it is the present duty of the Sovereign and the Parliament of Great Britain, to watch the movements of the Papacy with a jealous eye, to treat Popery in all its manifestations as a formidable and implacable foe, and to take care, as they shall answer to God and the nation, that nothing, lawful in itself and competent to them, shall be left undone, which may be fitted to check the progress of Popery, and to prevent its prevalence in the British Empire. Some of these considerations are very vigorously and eloquently brought out in Mr. Warren’s pamphlet, “The Queen or the Pope,” the title of which we have prefixed to this Article, and which we commend to the perusal of our readers.

We have thus sketched a very brief and imperfect outline

of a train of thought, which, if followed out and filled up, would, we are persuaded, afford a satisfactory vindication of the strong feeling which the recent Papal Aggression has called forth in the minds of Protestants, and of the measures which have been taken to repel it, while it would also shew that much more remains to be done than has yet been attempted. We regret that Lord John Russell's Bill against the Papal Aggression, did not contain a provision for the expulsion of the Cardinal, and that it has been emasculated of much of its original strength; but we would regard the rejection of it as a "heavy blow and a great discouragement to Protestantism," and we would rejoice to see it become the law of the land. There is, however, some additional legislation, bearing upon topics which this Papal Aggression suggests, especially nunneries and deathbed bequests, which is perfectly consistent with the principles of toleration, and can be fully vindicated, upon the ground of the obligation of Government to secure complete protection to all its subjects in their persons and their property. As legislation upon these points, and with this view, is thoroughly justifiable in itself, and is imperiously demanded by existing circumstances, by events which have most seasonably come to the knowledge of the community, we trust that the composition of the next House of Commons, will be such as to render the Prime Minister independent of the minions of Popish Continental despots like Lord Aberdeen and Sir James Graham, of the sordid "shopkeepers" of the Manchester school, and of the ferocious mouthpieces of the Irish priesthood, and enable him to prosecute with firmness the noble Protestant course, on which we would fain hope that he has entered.

We would return for a moment, in conclusion, to the Church of England. Whenever we think of the mass of confusion and inconsistency, not to speak of what we reckon error, to be found in the constitution of that Church, we feel grateful that we have no connexion with it—that we have no responsibility for the defence of its position or the management of its affairs, and that we are not called upon, unless we choose, to give advice to those who have. The course which should be adopted in existing circumstances by an out-and-out Church of England man, would be a very odd one, a course which it would be very difficult to trace in theory, and still more difficult to realize in practice. Upon Scriptural and Christian grounds, our general sympathies are all with the Evangelical party in that Church, and we are very willing to make ample allowance for the practical difficulties of their position. But we must say, that having the two primates at their head, they might surely now do something vigorous and decided, if they are not totally unfit for the emergency into which they have been thrown. We have been grieved by the indications which the Evangelical

clergy have been giving of late, that they place much reliance upon the exercise of the patronage and of the ecclesiastical supremacy of the Crown. They seem to be thus converting what is only a lucky accident, or rather a temporary providence, bringing good out of evil, into a principle of general and permanent application. The appointment of bishops by the Crown, and the final determination of Ecclesiastical causes by a civil tribunal, are utterly indefensible in principle, and never can commend themselves to the understandings and consciences of thoughtful and earnest men who know what a Church of Christ is; and the patronage of the Crown, and the decisions of its tribunals, may very soon be turned against them. The two main causes that fostered and strengthened Tractarianism, and led ultimately to Popery, in the Church of England, were the very equivocal Protestantism of the Liturgy and the Canons, and the dissatisfaction legitimately called forth by the patronage and the supremacy exercised by the Crown. It was the latter of these influences that was the immediate cause of the original Tractarian movement, and this has been the turning point of many of the recent secessions to the Church of Rome. In so far as these men merely deny the lawfulness of the controlling influence and jurisdiction of the Crown and the civil power, the Evangelical clergy are utterly unable to meet them on the ground of Scripture, whatever they may have to allege from the constitution of the Church of England. And if these really were the two main causes that led first to Tractarianism and then to Popery, surely the Church is bound to endeavour to apply corresponding remedies and preventives: 1st, by taking advantage of the present strong Protestant feeling for thoroughly clearing her Liturgy and Canons of the Popish element that corrupts them; and then, 2d, by trying at least to cast off the bondage of civil control, and to stand forth in the liberty and independence of a Church of Christ.*

* In speaking of the office of Cardinal, p. 285, we omitted to mention that during vacancies in the Papal chair, and these have sometimes lasted for a considerable period, the execution of the ordinary functions of the Pope, not only as the head of the Church, but also as the sovereign of the Roman States, is constitutionally vested in the Sacred College, as it is called, so that if the Pope were to die to-morrow, Cardinal Wiseman would at once, and *ipso facto*, be involved in the responsibilities and obligations of the actual possession, in conjunction with others, of the sovereignty of an independent foreign kingdom, a consideration which brings out very strikingly the incompatibility of the office he holds, with the discharge of the duties, or the enjoyment of the privileges, of a British subject.

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- ART. I.—1. *Principes de la Philosophie de l'Histoire, traduits de la Scienza Nuova de J. B. Vico.* Par JULES MICHELET. 2 tom. Paris, 1835.
2. *Système de Philosophie Positive.* Par AUGUSTE COMTE. 6 tom. Paris, 1830-42.
3. *A System of Logic, Ratiocinative and Inductive.* By JOHN STUART MILL. Book VI. "On the Logic of the Moral Sciences." 3d Edition. London, 1851.
4. *The Characteristics of the Present Age.* By JOHANN GOTTLIEB FICHTE. Translated by WILLIAM SMITH. London, 1849.
5. *Social Statics ; or, The Conditions essential to Human Happiness specified, and the first of them developed.* By HERBERT SPENCER. London, 1851.
6. *Lectures on Political Economy.* By FRANCIS WILLIAM NEWMAN, formerly Fellow of Balliol College, Oxford. London, 1851.

AMONG the many lucid and valuable conceptions that have been given to the world by the French thinker Auguste Comte, whose name, we believe, is now tolerably familiar to most British readers, one of the most serviceable is his classification of the Sciences. Taking for his principle of arrangement that of proceeding from the more general and simple onward to the more special and complex, M. Comte classifies the sciences or possible departments of human knowledge in the following order :—Mathematics ; Astronomy ; General Physics ; Chemistry ; Biology, or the science of individual organized beings, (subdivided into the two branches of Vegetable and Animal Physiology, of the latter of which the whole science of the human mind constitutes, in M. Comte's scheme, only a prolongation or ap-

pendage, under the form of a special investigation into the cerebral functions of the animal Man ;) and Sociology, or the science of human society. This arrangement of the sciences according to their natural relations, coincides, M. Comte affirms, with the order of their historical discovery and development ; and it ought also, he thinks, to be adopted as the proper order of study in a course of general education. At the present day, he thinks, only the first four sciences of the series—Mathematics, Astronomy, General Physics, and Chemistry—have been overtaken by the scientific spirit, and subjected to scientific methods,—the two last, indeed, being but recent acquisitions of the human intellect ; Biology is still an unorganized medley, in which, though the scientific spirit has entered upon it, and is daily effecting the most powerful reductions amid its phenomena, all sorts of superstitious and unscientific notions still prevail ; and lastly, Sociology, the mere conception of which as a possible science is but an event of yesterday, exists yet only as a hope, a prediction, a blank space chalked out by anticipation for the speculative labours of the future.

This is not the place for a thorough criticism of the foregoing classification of the sciences. Such a criticism would involve a rigorous representation of the whole battle between that system of so-called positive philosophy of which M. Comte is the advocate, and which resolves all human knowledge back into the one element of sensuous or external experience, and that other, and we believe truer system, which, assuming as its first axiom the radical distinction between man and the conditions in which he finds himself, seeks in the original and independent structure of the human mind itself the warrants of a higher certainty, and the necessary measure and predetermined form of all possible experience. Such an argument we would willingly attempt on a fitting occasion, but it is beyond our present purpose ; and we forego it the more readily, because we know that in the city where these pages shall first see the light a hundred swords will have already leapt from their scabbards at the mere prospect of a skirmish in the hereditary metaphysic cause. Accepted, however, with due limitations, the classification of the sciences proposed by M. Comte will be found of admirable use ; we perceive that it is already gaining ground in quarters where its origin is either unknown or concealed ; and without the slightest fear that good money will turn into slate-stones in our possession because it may have been obtained from a suspicious source, we feel convinced that we cannot better usher in the conception of Sociology as a possible science, than by calling attention to the place it holds relatively to other sciences in the scheme of the thinker who has announced its advent most formally, and written on it most largely.

The word *Sociology* is a convenient barbarism coined by M. Comte, and objectionable only as being a hybrid between the Latin and the Greek. Among the synonymous names are these—the Social Science, the Science of Society, Social Physics, Political Science, Historical Science, the Science of History. The general idea involved in all these phrases is essentially this:—All the phenomena of society, all the events and movements that occur in communities of human beings, take place in accordance with fixed natural laws; every community, however large it may be, however heterogeneous its composition, and however discordant the aims of its members, is yet borne along in a regular inwardly determined path or career; nay, the life of the human race as a whole, all calamities, wars, and national vicissitudes included, is but one grand and divinely pre-arranged evolution, pervaded by a huge intention, and leading to a definite result. From this description of the Social science it will be seen that it is properly placed by M. Comte as the last in the series of the sciences. Should any one, admitting the title of Mathematics, Astronomy, General Physics, and Chemistry to rank as sciences, deny the possibility of a Biological Science, at least in its higher departments, on the ground that the fact of life or free-will interposes a gulf, impassable to any scientific method, between the domain of matter and that of mind, such a person must *a fortiori* deny the possibility of a Social science; and, on the other hand, whosoever admits a psychological science, or science of the mental phenomena of individual human beings, to be possible, must see that its relation to its theoretical successor, the Social science, is that of the less to the more complex, and that as Psychology proper presupposes the conclusions of Physiology, Physiology those of Chemistry, Chemistry those of General Physics, General Physics those of Astronomy, and Astronomy those of Mathematics, so the conclusions of Psychology, together with those of the whole preceding series, must be carried forward as a contribution to the Social science, there to be combined with new elements, and treated to a higher elaboration.

The idea of the resistless progress of human affairs in a certain determined path is one which, in some form or other, has existed in every age. To the religious mind, especially, it has at all times been familiar. The ancient Pagan nations, when they fancied the interests of special communities to be under the care of special tutelary deities, entertained a notion the effect of which was in some degree scientific, inasmuch as it taught them to believe that a hidden unity and meaning underlay all the perplexing phenomena of visible history. Indeed, from the very nature of the object-matter of the Social science, the scientific aspiration must have manifested itself there long before it can

have entered on the domain of the later sciences of the inorganic series. From the beginning of the world social phenomena, such as wars, laws, and revolutions, have been among the most obvious and interesting objects of human attention ; whereas the materials of the mechanical and chemical sciences have been dug slowly into light one by one, and have never stood forth in attractive accumulation before the common gaze. Hence, curiously enough, the aspiration after a science of history is at least as old as the beginnings of astronomical science. While as yet Physics, Chemistry, and Physiology slumbered in the bosom of the earth, the heavenly luminaries wheeled their silent courses in the conspicuous vault above ; and no sooner had men ascertained something regarding their times and revolutions, than, hastening to connect these brilliant motions of the upper concave with the only others that rivalled them in extent and visibility, namely, the motions of men on the subjacent plane of earth, they sought to involve both in a single system, so that the little knowledge they had gained of the one might serve also in lieu of a science of the other. Although, therefore, in the order of strict development, Sociology may be the last of the sciences, it existed in conception, and as an attempt, almost before any of the others.

Familiar to the religious mind in all ages, the idea of a restless and determinate progress in human affairs has, of course, been specially familiar, and in a far higher form, to the Christian intellect. Two forms, we think, may be distinguished, in which the fundamental religious doctrine of a Divine Providence as pervading history has been developed in Christian philosophy. The first is the theory of general optimism, according to which the notion that all is for the best is superadded to the radical notion that all is predetermined. But however irresistibly this theory may recommend itself to the religious mind in the sense in which it was propounded by Leibnitz, namely, as applicable to the whole finished rhythm of the Divine procedure, to the universal series of ages and worlds, to assume it as true in that more restricted sense in which alone it could furnish the organizing principle of the Social science, namely, as predicable of this world by itself, would be quite unwarrantable. The idea, indeed, of a purely terrestrial optimism—the idea that this world has been necessarily arranged so as to contain within itself all the elements of a full and pacific solution, is at present, especially in the hands of a certain school of sentimentalists, one of the most notable impediments in the way of a sound and healthy philosophy. Far more fit to perform the function of a leading conception in the Social science, and at the same time far more peculiarly Christian in its character, is that other form of the great idea of Providence which sees in all history but one con-

tinuous evolution of the Divine scheme for the redemption of a fallen race. Although this view has been necessarily present in the really Christian mind of all ages, and although so celebrated a writer as Jonathan Edwards devoted one of his treatises to a special elaboration of it, the full apprehension of it by Christian thinkers, and even by Church-historians, seems to be an event hardly yet completed. Hence the continued prevalence of the distinction between sacred and profane history—a distinction proceeding, it is true, on certain important considerations, but the inordinate recognition of which has been very injurious. Even the similar distinction between ancient and modern history, though conventionally far more necessary, carries with it a mischievous effect.

But, though religious faith in general, and the Christian theology in particular, had thus from the beginning prescribed a mode of looking at history which was tantamount, had the fact been perceived, to the instauration of history as a possible science, the effective and detailed conception of such a science as a department of real knowledge was only practicable at an advanced point in the natural career of progressive human culture.

“The condition of politics,” says Mr. Mill, “was until very lately, and has scarcely even yet ceased to be, that which Bacon animadverted on, as the natural state of the sciences while their cultivation is abandoned to practitioners; not being carried on as a branch of speculative inquiry, but only with a view to the exigencies of daily practice, and the *fructifera experimenta* therefore being aimed at, almost to the exclusion of the *lucifera*. Such was medical investigation before physiology and natural history began to be cultivated as branches of general knowledge. The only questions examined were, what diet is wholesome? or what medicine will cure some given disease? without any previous systematic inquiry into the laws of nutrition, and of the healthy and morbid action of the different organs, on which laws the effect of any diet or medicine must evidently depend. And in politics the questions which engaged general attention were similar:—Is such an enactment, or such a form of government, beneficial or the reverse, either universally or to some particular community? without inquiry into the general conditions by which the operation of legislative measures, or the effects produced by forms of government, are determined. . . . No wonder that, when the phenomena of society have so rarely been contemplated in the point of view characteristic of science, the philosophy of society should have made little progress—should contain few general propositions sufficiently precise and certain for common inquirers to recognise in them a scientific character. The vulgar notion accordingly is, that all pretension to lay down general truths on politics and society is quackery; that no universality and no certainty are attainable in

such matters. What partly excuses this common notion is, that it is really not without foundation in one particular sense. A large proportion of those who have laid claim to the character of philosophic politicians, have attempted, not to ascertain universal sequences, but to frame universal precepts. They have had some one form of government, or system of laws, to fit all cases ; a pretension well meriting the ridicule with which it is treated by practitioners, and wholly unsupported by the analogy of the art to which, from the nature of its subject, that of politics must be most nearly allied. No one now supposes it possible that one remedy can cure all diseases, or even the same disease in all constitutions and habits of body."—*Mill's Logic*, vol. ii. pp. 449-451.

It is not difficult to account for the circumstance that this practical denial in detail of the possibility of a science of history has co-existed all along with that speculative assent to the possibility of such a science which is involved in the belief in a Divine Providence. The notion that all history is regulated by, and representative of, a divine purpose, might very well exist, and yet the notion that this purpose is immanent in history in the form of general laws, indissolubly inwrought through its very matter, might very well be wanting. But precisely in this latter notion lies the essence of the conception, so far as any devout Theist can entertain it, that history may be prosecuted as one of the inductive sciences. The conception of a Social science cannot be entertained at all by any one who has a true faith in God's existence, unless the grand primary notion of "the hand of God in history" is strictly reconcilable with the notion that the historic evolution, complex as it is, is carried on through the medium of what are called laws. Instead of a reconciliation, indeed, between the two notions, M. Comte and his school contend for the absolute transmutation of the one into the other ; the idea of general laws being, according to them, only the matured expression of what was formerly conceived under the notion of supernatural activity, which notion, therefore, is already being gradually disintegrated, and is doomed, they say, to ultimate evanescence, according as the expression into which it has been translated is efficiently extended out of the simpler into the more complex departments of human experience. But no one will fear this omen whose philosophy is faithful enough and profound enough to see how the idea of Deity may be retained, and intellectually required and exulted in, even in that field from which it is declared by the thinkers in question to have been irrecoverably banished—the field of astronomical science. He in whose mind the study of the *mécanique céleste* has produced such all-sufficing comfort as to make the idea of Divine energy rationally unnecessary in the contemplation of the stars and planets, has assu-

redly very little religion left to be lost in speculations on men and peoples.

Among the conditions that were necessary to the full conception of history as a possible science, and the want of which postponed that conception till a date comparatively so recent, M. Comte specifies two—a sufficient base of social phenomena from which to generalize; and a sufficient prior cultivation of the scientific spirit, and accumulation of scientific conclusions, by research in the field of the simpler sciences. Neither of these conditions, he thinks, was adequately fulfilled prior to the commencement of the eighteenth century. Thinkers who lived before that time neither had a sufficiently large or competently recorded range of past time wherein to prosecute their explorations, nor were they sufficiently trained in the inorganic and physiological sciences to know how to conduct their explorations in a hopeful manner. Acquiescing in this characteristic and just remark, we would call attention more expressly to one particular condition virtually involved in the second of those mentioned by M. Comte, the realization of which has, in our opinion, contributed enormously to the development of the conception of a Social science. We have often fancied that a most interesting essay might be written on the effects produced on human thought, both in the general and in individual minds, by the first thorough apprehension of the notion that the earth is not a plane, but a measurable globe. The effects of the gradual growth of this notion in the mind of the race as a whole have been immense; and much of the entire intellectual difference between the ancients and the more recent moderns may be summed up as consisting in the fact that this notion, unknown or very slightly apprehended by the former, has been familiar to the latter. Moreover, we would almost assert that the degree and constancy with which this notion is present in individual minds, may be taken as a test and measure of their comparative intellectual generality. All great modern poets, such as Dante, Shakespeare, Milton, and Goethe, have had this astronomical notion present in their minds in such a degree and so continually, that it may be said to have constituted one of the habitual forms of their thought. Thus, Shakespeare—

“Strike flat the thick rotundity o’ the world.”

Nor is it difficult to see, in particular, how this notion stands related to the development of Social science. The cardinal conception of such a science is the conception of humanity as a whole; and although minds of metaphysic reach, or minds that Christian doctrine had taught to rise above the idea of nationality, might be able to compass this conception, even while con-

tinuing to imagine the human race as the dispersed tenants of an undefined earth, yet the conception could be grasped firmly and familiarly only after the imagination had learned to picture the race as the living freight of a ponderable and moving ball, eight thousand miles, or thereby, in diameter. Nay, as by the increase of our mechanical means for locomotion, and for the rapid intercommunication between different parts of the earth, mankind at large are becoming more familiar with this conception of the physical form and limitation of our planet, it may be observed that the cardinal notion of the Social science is even now continually gaining force.

Pascal seems very distinctly to have apprehended this cardinal conception, as we have called it, of the science of history. "The entire succession of men," he said, "during the long series of ages, ought to be considered as a single individual, subsisting for ever, and continually learning." It is now admitted, however, that the merit of having first expounded the possibility of a social science, and of having first attempted to lay the speculative foundations of such a science, belongs to the illustrious Italian philosopher, Giovanni Battista Vico, who was born at Naples in the year 1668, and died, after an active, though not very happy life, in the year 1744. After having distinguished himself by various ingenious writings, Vico, in the year 1725, or when he was fifty-seven years of age, published his greatest work, the *Scienza Nuova*, under the following title—"Principles of a New Science, relative to the Common Nature of Nations, whereby may be discovered New Principles of Natural Law." To this work, the confused and fragmentary form of which caused it to be neglected for many years, the attention of scholars has recently been directed with considerable interest, chiefly, we believe, from the fact that two of the most important trains of speculation that have occupied the learned world during the last century—namely, the speculation as to the origin of the Homeric poems, and the personality or non-personality of Homer; and the speculation as to the authenticity or non-authenticity of early Roman history—are to be found there distinctly propounded. In the one speculation Vico seems to have anticipated Wolf; in the other Niebuhr. These brilliant anticipations, however, constituting together, as they do, almost a complete prevision of the modern theory of the Mythus, are but episodes in the development of the main doctrine of Vico's work, which is this: That, as the idea of the material world existed in the Divine mind before the creation of that world, and is now carried out by means of material laws; so there pre-existed in the Divine mind an eternal idea of human history, which idea is similarly carried out in the actual course of events. It is to the investi-

gation of this great subject that he invites attention, with the bold but perfectly just assertion, that in doing so he is installing "a new science." The manner in which he proceeds, proves that he meant to place the new science strictly under the guardianship of ordinary scientific methods, as these were then understood, not excepting the recently promulgated Baconian rule. He opens the work by laying down a base of material in the form of a chronological table of the events of ancient history as far as the second Punic war, and by enumerating, in connexion with it, certain axioms or general truths, by the application of which conclusions may be arrived at; after which he launches into an exposition of his own historical generalizations. An extract or two, quoted from Michelet's French translation of the work, will give a notion of its style and tenor.

"In default of knowing the *true*, men strive to arrive at the *certain*, to the end that, if the *intelligence* may not be satisfied by *science*, the *will* may at least repose on *conscience*.

"*Philosophy* contemplates the *reason*, whence comes the *science of the true*; *philology* studies the acts of human liberty, whence follows *authority*; and it is from this that there arises the *conscience of the certain*. We comprehend, therefore, under the name of philologists, all the grammarians, the historians, and the critics, who occupy themselves with the knowledge of *languages* and of *facts*, (as much the *internal* facts of the history of peoples, such as laws and usages, as the *external* facts, such as wars, treaties of peace and alliance, commerce, and travels.) The same axiom shews us that the philosophers have stopped half-way, in neglecting to give to their *reasonings* a *certitude* drawn from the *authority* of the philologists, and that the philologists have fallen into the same fault in neglecting to give to facts the character of *truth* which they would have received from *philosophic reasonings*. Had philosophers and philologists avoided this double error, they would have been more useful to society, and they would have anticipated us in the search after this new science.

"The study of the acts of human liberty, so uncertain by nature, derives its certitude and determination from the *common sense* applied by men to human *needs* or *uses*—a double source of the natural law of nations.

"The *common sense* is a judgment without reflection, participated by a whole order, a whole people, a whole nation, or the whole human race. This axiom will open up to us a new critic relative to the *authors of peoples*, who must have preceded by more than a thousand years the *authors of books*, with whom criticism hitherto has exclusively occupied itself.

"Uniform ideas born among peoples unknown to each other, must have a common ground of truth. A great principle this, according to which the common understanding of the human race is the criterium indicated by Providence for determining what is certain in the natural law of nations! This certitude is arrived at by knowing

the unity, the essence of this law, to which all nations conform with diverse modifications. The same axiom forecloses all the ideas that have been formed hitherto regarding the natural law of nations; a law which, according to the common opinion, must have come forth out of some one nation in order to be transmitted to all others. This error has been made predominant by the vanity of the Egyptians and the Greeks, who, if we are to believe themselves, have diffused civilisation over the world. It was a natural consequence of this opinion, that the law of the Twelve Tables was represented as having come to Rome from Greece. Thus civil law must have been communicated to other peoples by a purely human arrangement; and there would have been no law planted by Divine Providence in the nature, in the manners, of humanity at large, and ordained by it as binding among all nations! We shall not cease in this work to strive to demonstrate that the natural law of nations has its birth in each people in particular, without any one of them having any knowledge of the others; and that, consequently, on the occasion of wars, embassies, alliances, treaties of commerce, this law has been recognised as common to the whole human race.

“The *nature* of things consists in this, that the things happen in certain circumstances, and in certain manners. Let circumstances present themselves the same, things will happen the same and not different.”—*Scienza Nuova*, Book i. ch. 2, secs. 9-14.

“The human mind naturally loves uniformity. This axiom applied to legends depends on an observation. Let a man be famous for good or evil, the popular mind will not fail to place him in such or such a circumstance, and to invent in his behalf fables in harmony with his character—*lies in fact*, doubtless, but *truths in idea*, since the public only imagines what is analogous to reality. Let one reflect, and one will find that the *poetically true* is the *metaphysically true*, and that whatever of the *physically true* is not conformable thereto ought to pass for false. The true captain, for example, is the Godfrey of Tasso; all those who do not wholly conform to this model merit not the name of captain. A consideration important in the science of poetry!”—*Ibid.*, sec. 47.

“The *vanity of nations*, each of which wishes to be considered the most ancient of all, deprives us of the hope of finding the principles of the new science in the writings of philologists; and the *vanity of savans*, who will have it that their favourite sciences had reached perfection from the commencement of the world, prevents us from seeking them in the works of philosophers; we will follow our researches, therefore, as if books did not exist. But in this dark night, in which the most remote antiquity is shrouded from our eyes, there appears a light which cannot lead us wrong. I speak of this incontestable truth: *The social world is certainly the work of men*, whence it results that its principles can and ought to be found in the modifications of human intelligence themselves. This admitted, will not every reflecting man be astonished that philosophers have seriously attempted to understand the *world of nature*, which God has made, and whereof

He has reserved the science to Himself, and have neglected to meditate on that *social world* which men can understand, inasmuch as it is their own work? Since *the social world is the work of men*, let us examine in what they are agreed, and will always agree. It is thence that we shall derive *the principles which explain how all societies form, and how they maintain themselves*—principles universal and eternal, as those of every science ought to be.”—*Scienza Nuova*, Book i. ch. 3.

“The new science will, in one of its principal aspects, be a *civil theology of the Divine Providence*, a thing which seems till now to have been wanting. Philosophers have either entirely misconceived Providence, as the Stoics and the Epicureans did, or have considered it solely in the physical order of things. They bestow the name of *natural theology* on the metaphysic in which they study this attribute of God, and they rest their reasonings on observations drawn from the *material world*; but it was, above all, in *the economy of the civil world* that they ought to have sought their proofs of Providence. The new science will be, so to speak, a *demonstration in fact, a historical demonstration, of Providence*; inasmuch as it ought to be a history of the decrees by which this Providence has governed, without the knowledge of men, and often in spite of them, the grand corporation of the human race. Although this world has been created *particularly, and in time*, the laws that have been given to it are not the less *universal and eternal*. . . . In the whole series of possible things, can our spirit imagine causes more numerous, less numerous, or other than those of which the social world is the product? . . . In order to find the so-called nature of things as regards human affairs, the new science proceeds by a severe *analysis of the thoughts of men relative to the needs or uses of the social life, which are the two sources of the natural law of nations*. Thus considered under the second of its principal aspects, the new science is a *history of human ideas*, in accordance with which it appears that *the metaphysic of the human mind* should proceed. If it is true that *the sciences ought to commence at the same point where their subject (object-matter) has commenced*, metaphysics, this queen of the sciences, commences at the epoch when men set themselves to think *humanly*, and not at that when philosophers set themselves to reflect on human ideas. In order to determine the epoch and the place in which these ideas had their birth, in order to give to their history the certitude which it ought to derive from the *metaphysical chronology and geography* proper to them, the new science applies a similarly *metaphysical criticism* to the founders, the *authors of nations*; who preceded, by more than a thousand years, the *authors of books*, with whom philological criticism has hitherto occupied itself. The criterium of which it makes use, is that which the Divine Providence has taught equally to all nations, namely, *the common understanding of the human race*, determined by the necessary convenience of human affairs themselves. It is for this reason that the sort of proof on which we principally lean is, that, such laws having been established by Providence, the destiny of nations *must have followed, still does, and always will*, follow the course indicated by the new science, even

were an infinite number of worlds to arise during eternity—a hypothesis indubitably false. In this manner the new science traces the eternal circle of an *ideal history*, in which *the histories of all nations in time* revolve, with their birth, their progress, their decline, and their termination. . . . What history more certain than that in which the same person is at once the actor and the historian? Thus the new science proceeds precisely after the manner of geometry, which at once creates and contemplates the ideal world of magnitudes; but the new science has as much more of reality, as the laws which regulate human affairs have, than mere points, lines, surfaces, and figures. This shews that the proofs, whereof we have spoken, are of a *divine* species, and that they ought, O reader, to give thee a *divine* pleasure, for with God to know and to do are the same thing.”—*Scienza Nuova*, Book i. ch. 4.

From these extracts, in which we have purposely preserved the original italics, it will be seen how powerfully Vico had grasped the conception of the new science. The expressions he uses are, it will be observed, somewhat hazy and obsolete, and his book is, on the whole, rather a medley of thoughts and fancies, pervaded by a central idea, than a coherent treatise; but we doubt if there are not things in Vico with which the intellect, even of our own time, has not yet fully come up. We doubt, for example, if even yet our thinkers could furnish a deeper summary of the truths on which the Social science proceeds, than that which may be condensed from the foregoing passages of the *Scienza Nuova*; to wit, that human nature is a substance, so to speak, possessing certain essential properties and attributes, like any other substance to which men give a name; that wherever it is, therefore, human nature will, if the conditions are similar, yield similar manifestations; that, consequently, separate nations commencing the career of civilisation at the same time, or from the same point, would necessarily, and without any communication with each other, go through stages similar in the main; that the true power whereby this social life, this development of human nature in the mass, is advanced, is to be sought for primarily, not in the books of writers, but in the popular and universal sense of mankind, the *sapienza volgare*, the general social heart; that what the generality of the human race feels to be just is *de facto* the rule of the social life; that the manner in which this rule acts for the evolution of history, is by the concentration, conscious or unconscious, of the common understanding or sense of mankind on general human needs and uses as they arise; and that the career which humanity thus actually works out for itself, is the fulfilment of the ideal scheme of history which pre-existed in the Divine mind.

It is only necessary to describe farther what was Vico's own conclusion as to the nature of the path in which humanity ad-

vances; in other words, what was his theory of history. Confining himself at first to the ancient world, the scheme of which he had laid down at the outset in his chronological table as a base of speculation, he defines the course of ancient history among all the nations usually considered under that head, as having consisted of three ages or states of being—first, a divine or theocratic age; next, a heroic or poetical age; and lastly, a human or consciously rational age. In the first age, all the manifestations of human activity were characterized by the prevalence of the religious mode of thought alone and by itself—laws and governments were theocratic, manners and customs were acts of worship, judicial trials were appeals to the divinity, even language was hieroglyphic; in the second age, the heroic mode of thought dominated—hence aristocratic governments, feudal customs, metaphorical or poetical language, &c.; and lastly, in the human age, the procedure of which is consciously rational, come monarchical or democratic governments, civilized social usages, and language either scientific or scientifically directed. Such, Vico says, is the true generalization of the course of history, as exhibited in the ancient nations. Now, his theory is, that modern history is essentially a repetition of this process; that is to say, that the destruction of the Roman civilisation by the northern races was, as it were, a reduction of human society back to its beginnings in primary chaos, and that the progress of the modern nations since, has been essentially an advance in the career of the three stages—the divine, the heroic, and the human. In other words, Vico's theory or representation of history is that of a recurring cycle or curve, repeating itself indefinitely, in each case presenting distinctly the same succession of stages. Society, according to him, is a phoenix, periodically destroyed, and periodically arising out of its own ashes.

Though not deficient in a certain superficial plausibility, and though possibly containing a fund of real truth, which may be effectively absorbed into a higher view, this conclusion of Vico as to the nature of the path in which the human race necessarily advances, is certainly a failure in the supreme sense in which it is promulgated, and far less worthy of commemoration than the fine prior speculations on which it is founded. Accordingly, in the progress of the conception of a Social science since Vico's time, his special theory of the law of the historic movement has almost disappeared, perhaps without having received a sufficient appreciation of what is really substantial in it. His general views, however, have gradually gained ground in the speculative world, though at a rate so slow as to prove his wonderful forwardness as a thinker. To trace the development of his main conception systematically, from the publication of the *Scienza Nuova* to the

present time, is impossible here ; we can but indicate the points that seem most worthy of notice.

Vico's own principle of the necessary appearance of similar social manifestations in similar circumstances would be a sufficient answer to those who should insist on tracing the growth of historical science in France during the last and the present century directly to his influence. Were there evidence that those of his French contemporaries, whose influence on historical literature was most marked, had studied or borrowed from his work, the case would, of course, be altered ; but this is a question on which we cannot enter. Suffice it to say, that about the middle of last century, there did arise in France a new mode of regarding history, and of writing it, which proved that the notion of a possible Social science had obtained a place in the French mind. This change consisted not so much in an express and conscious effort to realize a result previously conceived under the name of Social science, as in a kind of instinct which led writers to treat the facts of history in a spirit of scientific generality, and to philosophize on social details. Among the names most worthy of notice in connexion with this determination of French thought, is that of Montesquieu. In his *Essay on the Greatness of the Romans*, (1734,) and more conspicuously, in his *Spirit of Laws*, (1748,) Montesquieu, without having a conception of the Social science as a whole by any means comparable to that of Vico, gave his countrymen a very instructive example of the manner in which the inductive method might be applied in the work of political generalization. His chief use of this method may be said to have consisted in the perception that, by observing the circumstances in which particular human customs and particular modes of government are uniformly found, conclusions may be arrived at as regards the causes of which such social manifestations are the product. Probably the value of this lesson was not diminished by the fact that the value of certain kinds of causes—those of climate, for example—in modifying human institutions, was greatly exaggerated by Montesquieu.

The tendency to generality, to the observation of social coincidences and sequences, thus introduced into French historical literature, and so consistent with the habits of the French mind, received an immense increase about the epoch of the French Revolution. Considered, indeed, with reference to its intellectual consequences, that event may be described as a prodigious experiment worked by Nature for the behoof of the Social science, at a time when nothing more could be made of a mere survey of the quiet past. Among the new conceptions with which it flooded the speculative world, one of the most important was that involved in the now time-honoured phrase, *Progress of the*

Species. The authorship of this conception in the sense in which it has since been current, is ascribed more particularly to the unfortunate Condorcet, whose "Sketch of a Historic View of the Progress of the Human Mind" was written in 1793; the germ of the conception, however, may be traced to Turgot. Since it was promulgated it is certain that the theory of progress, of continued motion in one direction, as the law of history, has completely displaced the cyclical theory of Vico.

As promulgated at the time of the French Revolution, however, the theory of progress, as the law of the historic movement, was clogged with certain serious misapprehensions which robbed it of its genuine scientific value, and which have vitiated the whole course of subsequent social speculation. As the word Progress, etymologically, implies nothing more than continuous advancement in a straight line, so, when applied as a description of the character of the historic movement, it ought properly to imply nothing more than this—that the evolution of the human destinies proceeds regularly through a series of continuous stages; that in the succession of human generations each is to be regarded as the necessary result of that which preceded it, and as the necessary parent of that which follows it. The thinkers of the French Revolution, however, did not master this purely scientific view of the social progress. Exulting in the vast emancipation which had just been wrought out, drunk with their new liberties, they represented themselves as cut off from the whole preceding past by a great gulf which humanity had miraculously overleaped; on all the many centuries that lay on the other side of that gulf they looked back with an eye of scorn, as if nothing had ever been rightly done in them, except perhaps by a Brutus here and there in an anti-despotic fit; while to the centuries that were to come they looked forward with a sanguine enthusiasm, as along a bright vista, wherein, with the aid of reason and representative institutions, mankind were to attain happiness and perfection. Though natural and even necessary as a protest against the opposite mode of thinking which had till then prevailed, and which represented all history as a degeneracy from a golden past, it is obvious that this view of the revolutionary thinkers was deplorably unscientific. In the first place, as regards its general vituperation of the past, it proceeded on a total oblivion of the law of historic continuity, which teaches us to regard the entire succession of generations as connected together in such a manner that not one generation could possibly have been omitted, or have been, in the slightest particular, different from what it was, without a complete change in the final result. And, in the second place, in holding forth the prospect of infinite perfectibility, it was false to the scientific law that the

length to which any process can go is limited by the nature of the elements concerned in the process. Yet, both these errors have been perpetuated in association with the word *Progress*. The perpetuation of the one we see in the daily speech and conduct of that ungenial class of sciolists who are ever regaling us with the song, "Our enlightened age—our enlightened age;" the perpetuation of the other in the daily speech and conduct of those more amiable sciolists who spend their time in foretelling the final perfection of the species. Of the two errors, though they are sometimes found in combination, the former is the more noxious and the more ungraceful. That mode of thinking which, boasting of the enlightenment of the present, looks back to the past with scorn and intolerance, denouncing all that was there transacted as wrong and irrational, representing all its great men as brutes or barbarians, all its institutions as blunders, and all its movements as mere waste of energy, is a mode of thinking to which no mercy should be shewn, but which should be mauled on the head wherever it appears. What! shall men malign the dead over whom they walk, and the fruit of whose labours they thanklessly inherit? Shall we, so proud of what we are, find nothing right, nothing admirable, in that series of past efforts by which Nature has at least arrived at the pitch of producing us? Let us take care! If we of generation M think so scornfully of generations A, B, C, &c., what will generation Q, not to speak of generation Z, have a right to think of us? That view of history, in short, is alone just, which regards each generation as a necessary part of the whole historic evolution, and as deriving its title and its meaning from the relation which it bears to that whole. How this view is to be reconciled with the right of passing moral judgments on the past, and how it is also to be incorporated with a true theory of progressive human improvement, are questions of a higher nature.

The position to which historical philosophy had been brought in France and in other countries, by the dissemination of the progress-notion in the sense which we have described, is represented by the condition of politics both in France and in other countries since that time. On the one hand arose *Toryism* in its various forms, defending the cause of order and clinging to the traditions of the past; on the other hand arose *Radicalism*, or the revolutionary doctrine, to press the cause of progress, and apply a critical analysis to the past; and the business of reconciling between the two was undertaken by *Whiggism*, or the doctrine of the finality of parliamentary institutions on the English plan. Into this medley of opinions, the direct consequence of the French Revolution, two distinct streams of speculation have since discharged themselves, the effect of which, conjoined

with that produced by the continued and zealous prosecution of all kinds of historical studies in France, has been to bring the political philosophy of that country exactly to its present state. These two streams of speculation are—*first*, that contributed by the school of *Political Economy*; and, *secondly*, that contributed by the school of *Socialism*. Political economy, as is well explained by its most distinguished living English teacher, is a departmental science, cut out from the general body of the Social science, because the class of social phenomena of which it treats are easily capable of being viewed apart. These phenomena are “those,” says Mr. Mill, “in which the immediately determining causes are principally those which act through the desire of wealth; and in which the psychological law mainly concerned is the familiar one, that a greater gain is preferred to a smaller. By reasoning from that one law of human nature, and from the principal outward circumstances which operate upon the human mind through that law, we may be enabled to explain and predict this portion of the phenomena of society, so far as they depend on that class of circumstances only; overlooking the influence of any other of the circumstances of society; and therefore neither tracing back the circumstances which we do take into account, to their possible origin in some other facts in the social state, nor making allowance for the manner in which any of those other circumstances may interfere with and counteract or modify the effect of the former.” Although, however, by thus isolating the economic portion of the social phenomena, it is possible to construct a special science, the prosecution of which shall be far more easy than that of the general Social science to which it belongs, it is clear that the ultimate destination of all those truths which may be arrived at in the special or economic science, is to be returned into the body of the general or Social science, there to act, so to speak, only as a thickening ingredient, to facilitate, by its interpenetrating power, the reduction of the remaining phenomena. Such a thickening ingredient, such a body of partial doctrine, has actually been contributed to Social science by the labours of political economists; indeed, among the surest generalizations that social or political science can exhibit are those which have been contributed by the economists; and that these generalizations are insufficient to yield a complete rule of social procedure—a fact involved in the departmental nature of the science to which they belong—does not detract from their real value. But besides contributing a body of actual doctrines towards the formation of a Social science, political economy has, by the general spirit and tenor of its teachings, had a reflex effect on the very conception of such a science. The primary notion of political economy, it is well known, is that of

freedom, of non-intervention, of the correlation of supply and demand. Now, extend this notion, and it will be seen that the studies of the political economists have been peculiarly fitted to educate men in the conception, so important to a right view of the Social science, of the spontaneous tendency of phenomena towards a natural order, and of the necessary inter-relation of all classes of social phenomena and of all portions of society. Followed out to the utmost, indeed, the spirit of political economy leads to the fatal conclusion—that the conduct of the social life should be left entirely to the spontaneous operation of those laws which have their seat of action in the minds of individuals, without any attempt on the part of society, as such, to exert a controlling influence; in other words, without allowing to the State or to institutions for general government any higher function than that of protecting the individual freedom. And it is in this respect that political economy has called forth the antagonistic doctrine of Socialism. Viewed historically, Socialism has certainly some of the marks of a genuine step in the progressive development of the human mind; hardly any movement, indeed, could be named, answering more exactly, in some of its characters, at least, to Vico's beautiful criterium of what constitutes a real and authoritative intention of Nature in history—namely, a clear origin in the common understanding and sense of mankind as applied to the consideration of a newly-felt want. The influence of Socialism, however, on Social science, properly so called, has consisted less in the addition of positive doctrines of any substantial value, than in the general impulse it has given to social speculation, and the effect it has had in familiarizing the mind to the contemplation of large social combinations. As opposed to political economy its effect has been to vindicate the right of other laws than those concerned in the acquisition of wealth to a recognition in the social constitution; and also to reassert, in a new and higher form, the necessity of general government, that is, the scientific superiority of the will of society, as such, to that of all its members individually. On this last point we shall have yet to enlarge.*

Out of this unorganized mixture of so many elements—Toryism, Radicalism, Whiggism, economic dogma, and Socialist aspi-

* In Mr. Newman's recently published Lectures on Political Economy the reader will find a very clear recognition of the fact that Political Economy is but a subordinate or departmental science, accompanied at the same time with a very emphatic assertion of the real claims of this science, departmental as it is. Among the many merits of Mr. Newman's volume, however, we cannot rank his unexcepting depreciation of the political force of the Socialist movement. No movement occupying so large a space in history could possibly be so devoid of positive worth of any kind as he represents Socialism to be. In this respect, Mr. Mill, who anticipates much from Socialism, seems to entertain the more just and philosophic view.

ration—has resulted that state of anarchy in political matters, in which France, and with it almost all the rest of Europe, now find themselves. Names might be mentioned, such as those of Saint-Simon, Michel Chevalier, Guizot, and Proudhon, illustrating, each in a special manner, the various leading directions of French thought that meet and cross each other in this anarchy. It is time, however, to allude more particularly to the views of M. Comte, who, notwithstanding the small acceptance which his speculations at present find in his own country, really is, what he asserts himself to be, the man who has most distinctly perceived the fact of this anarchy, and has made the most systematic attempt to bring it to an end, by introducing into politics the methods of general science. M. Comte's views of the Social science, and of its application to the present state of Europe, are to be gathered from various writings published since 1822, but chiefly from the last three volumes of his principal work, the *Système de Philosophie Positive*. These volumes, published between 1839 and 1842, are entirely devoted to Sociology, viewed as the last member of the whole series of positive sciences. We understand, indeed, that M. Comte has an express and separate work on Sociology now ready, containing a more detailed exposition of his views; but the work cannot find a publisher.

M. Comte's services to Social science may be classed under three heads:—*First*, His distinct exposition of the possibility of such a science, of its nature and methods, and of the benefits that will arise from its cultivation; *second*, His attempt to initiate such a science by supplying what he conceives to be a correct formula of the cardinal law of all social development; and *third*, His contribution, while illustrating this law, of a mass of independent propositions or generalizations, applicable either to the interpretation of history or to the conduct of politics, and intended to form the nucleus of a body of positive social doctrine. Our admiration of his remarkable merits under the first of these heads is qualified by that fundamental and profound objection which we have to his whole philosophy. According to M. Comte's definition of science, phenomena are then only viewed scientifically when they are contemplated as arising from the operation of natural laws, and when the notion of divine or supernatural activity, in connexion with them, is entirely got rid of as irrational and absurd. Hence, when he proposes to invest history with the dignity and name of a science, what he really means, is to perform for social what he thinks has been already performed for astronomical and physical phenomena, namely, chase the idea of deity or providence from the midst of them, so as thus finally to extinguish that idea from the human mind altogether, and complete the triumph of atheism. Now

this, as we have already hinted, is quite consistent with that principle of universal empiricism on which the philosophy of Comte and his school is irrevocably founded. If the conception of deity is empiric, a mere generalization from European, Asiatic, African, and American experience, then the idea which generalization has created, generalization may dissipate. But if, as a nobler philosophy tells us, our faith in God rests on another, even an eternal foundation, then all this is false; and, as the religious sentiment which teaches the presence and power of deity may coexist in astronomical science with a conception of invariable astronomical laws, as strong and accurate as that which Comte himself holds, so, also, in Social science the religious sentiment may and will survive all the inroads of the most remorseless *positivité*. In this respect, even Vico's old conception of the Social science was nobler and profounder than that of Comte; and we shall soon see, in other instances, that, whatever Comte may think, the conception of history as a thing of laws and sequences, by no means belongs to the avatar of atheism.

The formula laid down by Comte, as expressive of the main law of all social development, is this—that the human mind, both in the general career of history, and in the process of elaborating the special sciences, has passed through three successive stages, which he calls respectively, the theological, the metaphysical, and the positive. In the first stage, man explains phenomena by the hypothesis of supernatural activity; in the second he substitutes abstract or metaphysical notions, such as those implied in the words nature, power, goodness, for real divine entities; and in the third he arrives at accurate science, in the absolute resolution of all that he sees into natural laws. Corresponding, in the material, with the first or theological stage in the spiritual order, is, according to Comte, the age of military activity, through which humanity has already almost passed; corresponding to the third or positive stage, is the age of industrial activity, already begun; and that we are still in a state of transition between the two, arises from our being still, in a great measure, in the second or metaphysical stage. Of this alleged law of history, which M. Comte claims as his greatest discovery, we have only to say that, though liable in the sense in which it is advanced, to the fundamental objection already specified, and though by no means so enormous an intellectual feat in our eyes as it seems in those of M. Comte himself, it will yet be found a very serviceable expression in representing certain aspects of the social progress. Indeed, it does not greatly differ, even verbally, from the law of the historic movement already mentioned as having been long ago propounded by Vico. This is not the only instance, however, in which M. Comte's exclusive acquaint-

ance with the writers of his own country, or at least scanty acquaintance with foreign thought, has led him to exaggerate the novelty of his views.

To our mind, the most valuable of the services rendered by M. Comte to the science of society, next to his advocacy of the claims of the science itself, consists in the number of miscellaneous generalities which he has contributed towards the formation of the science. We hardly know a book so rich in luminous propositions, applicable to politics, as the last three volumes of the *Cours de Philosophie Positive*. Notwithstanding the inherent defects of the author's philosophy, which frequently vitiate his speculations, these three volumes may be recommended as a magazine of truths, which it would be for the advantage of every speculative or practical politician to have thoroughly mastered. M. Comte's criticisms of the existing state of politics deserve special attention. Without entering, however, into a detailed consideration of any of the multitudinous propositions offered in the treatise as a nucleus of future political doctrine, let us mention one admirable distinction transplanted by M. Comte with the happiest effects from the anterior sciences of his series into the science of social physics. In material physics, it is well known, a distinction is made between what are called *statical laws*, that is the laws or conditions of equilibrium, and what are called *dynamical laws*, that is the laws or conditions of movement. A similar distinction is made in biological studies, where the phenomena of *organization*, properly so called, are distinguished from those of *life*, properly so called; the one being made the subject of a statical science, under the name of anatomy, and the other the subject of a dynamical science, under the name of physiology. Extending this distinction to Sociology, M. Comte divides that science ideally into two branches of inquiry, the one of which he calls *social statics*, the other *social dynamics*. Under the title of social statics he includes all investigations into the laws of social equilibrium or organization, all the anatomy of society; under the title of social dynamics, he includes all investigations into the laws of social movement or life, all the physiology of society. In other words, social statics aims at a *theory of possible social simultaneities*,—that is, at the knowledge of what social fact or phenomenon can spontaneously co-exist with what other social fact or phenomenon; social dynamics aims at a *theory of possible social successions*,—that is, at the knowledge of what social phenomenon or arrangement of phenomena will result from, or will produce, what other social phenomenon or arrangement of phenomena. Now, inasmuch as disorder consists in an attempt to force impossible social simultaneities, and as the failure of progress arises from ignorance of possible social successions, it follows that it belongs

to social statics to furnish politicians with the true theory of *order*, and to social dynamics to furnish them with the true theory of *progress*; and that only by the conjoint study of both, as branches of one science, can the great problem of politics, the reconciliation of the interests of order with those of progress, be adequately solved.

Having thus traced, in a cursory manner, the progress of the conception of a Social science, as that has been developed more especially in the French mind during the last century, let us turn our attention to the fate of the same conception in Germany. As, in many respects, however, our sketch of the progress of historical philosophy in France may be accepted as a sketch of its progress over all Europe, we have only to note in particular, as regards Germany, those points wherein the special peculiarities of German thought have modified the general conception of a Social science in that country, and in all, wherever situated, whom its thinkers have affected.

One of the first Germans that caught or reproduced the idea of Vico, was the celebrated Herder, whose well-known work, entitled, "Ideas towards a Philosophy of History," was published in 1774. In the preface to the second edition of that work, there occurs the following sentence, explanatory of its title and its general tenor:—"At an early age, when the dawn of science appeared to my sight in all its beauty, the thought frequently occurred to me, whether, as everything in the world has its philosophy and science, there must not also be a philosophy or science of what concerns us most nearly, of the history of mankind at large." In accordance with the view thus briefly propounded, there is found throughout Herder's work, both in its dissertations on the physical relation of man to the rest of the universe, and in its general survey of human history, a constant recognition of the idea of scientific connexion, and of the presence of a meaning, determining each part and characterizing the whole. Nor is this rendered less appreciable by the glowing tone of religious eloquence which pervades the work, and the natural manner in which, in his language, the cold algebraic things, called general laws, are always represented as the external symptoms of a divine and ever-working purpose.

Herder's idea of a science of history, however, hardly equalled in precision that of Vico, and certainly fell short of the idea of such a science, which lay, clear and definite, amid such a mass of other mighty things, in the mind of the great Kant. That we were not wrong in saying that M. Comte's exclusive acquaintance with French thought, leads him to exaggerate the novelty of many of the views which he expounds, and the claims of the French intellect to original property in them, will appear, we believe, from the following most notable extract from a short

essay of Kant's published in 1784, and entitled, "An Idea of a Universal History, in a Cosmopolitical Point of View."— (*Idee zu einer allgemeinen Geschichte in weltbürgerlicher Absicht.*)

"Whatever be the conception of the liberty of the will which one may form in a metaphysical point of view, its phenomena, human actions, are determined, just as well as every other kind of natural events, according to universal laws of nature. It is to be hoped that the history which is occupied about the narrative of these phenomena, however deeply concealed their causes may be, will, when it contemplates the play of the liberty of the human will in the main, discover a regular course of it, and in such a manner that that which is obviously implicated and irregular in single subjects, will be cognised in the whole species as a continually progressive, though slow, unfolding of its original predispositions. Thus, marriages, and the births and deaths arising from them, seem, as the free-will of men has so great an influence on them, to be subjected to no rule according to which their number can be previously determined by reckoning; and yet the yearly tables of them in great nations, evince that they happen just as much according to constant laws of nature as the so inconstant rains, whose happening cannot be previously determined singly, but which, on the whole, do not fail to maintain the growth of plants, the flow of rivers, and other dispositions of nature, in a uniform uninterrupted course. Individuals, and even whole nations, little think that, while they, every one according to his own mind, and the one often contrary to the other, pursue their own individual purposes, they go on unobserved, as if guided by a clue, in a design of nature which is unknown to them, and labour at the furtherance of that design; which design, were it known, would signify very little to them. As men, on the whole, do not proceed in their pursuits conformably to an instinct merely, like brutes, and yet not according to a concerted plan, as rational citizens of the world, it seems that no history of them, agreeable to a plan, (as of the bees and the beavers,) is possible. One cannot forbear a certain indignation at seeing their actions represented on the great theatre of the world, and, notwithstanding the wisdom of individuals appearing here and there, at finding, at last, everything in the gross composed of madness, of childish vanity, and frequently of childish wickedness and the rage of destruction; so that one is finally at a loss what sort of conception one ought to form of our species, so conceited of its superiority. There is here no expedient for the philosopher, but (as he cannot at all presuppose, in men and in their actions in gross, any rational proper design) that of endeavouring to discover a *design of nature* in this nonsensical course of human affairs, so that a history of creatures who proceed without a plan, may nevertheless be possible, according to such a determinate plan of nature. Let us see whether we can succeed in finding a clue to such a history, and we shall then leave it to nature to produce the man who is to compose the history itself afterwards. She thus produced a Kepler, who subjected, in an unexpected manner, to precise laws the eccentric orbits of the planets, and a Newton, who explained these laws from a universal natural cause."

The special "clue" to the course of history, which Kant thus announces it to be the purpose of his essay to furnish, in other words, the special philosophic conception in the light of which he proposes that history, as a whole, should be regarded, is that indicated by the phrase of the title, *In weltbürgerlicher Absicht*, "In a cosmopolitical point of view." The manner in which he evolves this conception is as follows:—All the natural predispositions of a creature are destined, one time or another, to be developed completely and conformably to an end; in man, however, as a rational being, and capable of advancing, therefore, only by slow and continued effort, those natural predispositions, which lead to the use of reason, can be completely developed only in the species, not in the individual; it is the will of nature that man shall unfold entirely out of himself everything that surpasses the order of his mere animal existence; the means which nature uses to bring about the development of all her predispositions, is their antagonism in society; the greatest problem for the human species, to the solution of which all nature compels it, is the establishment of a universal civil society administering law to itself; this problem is at once the most difficult, and that which will be solved the latest by the human species; it is dependent on the other problem, of the establishment of a legal external inter-relation of states, and cannot be solved except through that problem; therefore, "*The history of the human species in the gross may be considered as the execution of a hidden plan of nature, in order to bring about an internal perfect constitution of state, and, to this end, an external one too, as the only condition of things in which she can fully unfold all the predispositions in humanity.*" This clue Kant does not offer as the only one that could be given, but simply as one which appears to him to have peculiar advantages. By viewing all history as a secret striving forward of nature towards the goal of cosmopolitanism, *i.e.*, towards the establishment of a universal civil constitution of human society through the medium of a prior legal union of states, we shall be able, Kant believes, not only to diffuse explanatory light through the distracted play of human affairs, not only to arrive at a kind of art of political prediction, but also to open up to the human race a consolatory prospect of its future on the earth, and so to offer to reason "a justification (*Rechtfertigung*) of *Nature*, or rather of *Providence*." Moreover, as he sagaciously remarks, such a view will correspond with that which people will be soon obliged to take at any rate; for, considering what a load of history will be transmitted to posterity, a load which will be all the larger for the laudable circumstantiality with which history is now written, it is clear that posterity will take account of the earlier portions of the past only from the point of view of what interests themselves, in other words, in the light

of the question, What have nations and governments perfected, what spoiled, in a cosmopolitical point of view?

Kant protests that, though the clue proposed in his essay is in some degree derived *a priori*, it is not his intention to supplant the merely empiric generalization of history; he has but given "a notion," he says, "of what a philosophic head (who must have a great knowledge of history) might try from another point of view." Still, as the philosophic heads of Germany, subsequent to Kant, have generally shunned that "elaboration of history empirically compiled merely," which he left open to them, it may be said that in the tinge of *a priori* thought which pervades the foregoing extract, we have the characteristic difference between the philosophy of history as it has been prosecuted in Germany, and the philosophy of history as it has been generally understood in France. Comte's notion of the way to proceed in theorizing upon history corresponds with the nature of his system. Acquiring as large a knowledge as possible of the empiric facts of history, he would construct, with no other aid than that of his previous empiric conclusions in other sciences, the most general possible expression that would accurately describe these facts; and then, avoiding, as metaphysical or theological, all talk of what nature or any other entity *must have* designed, or not designed, with regard to the human race, he would come forth with this general expression, and affirm it to *be* the law of history. Kant, on the other hand, coming, like a strong man in the morning, from a prior field of teleology and metaphysic, wherein he has been expatiating, brings with him into history a clue derived from his more abstract speculations, and eking this out by sagacious empiric observation, (the perception of the tendency of mankind towards an external cosmopolitical organization was less easy in Kant's time than it is in ours,) he announces his law in terms which correspond with the mode in which it was conceived, and religiously links, as it were, this ephemeral world with the realms of the everlasting and invisible. And thus, even in history, there enacts itself a portion of the eternal antagonism between the two polar philosophies.

A far less mitigated attempt than that of Kant to introduce *a priori* reasonings into history, was made by his successor Fichte, whose convictions on this point were so strong that he would not acknowledge any history to be philosophical unless the author were prepared to exhibit the actual phenomena with which he had to deal, under the form of necessary deductions from some *a priori* principle. His views on this matter are thus expressed in the first of his lectures on "the Characteristics of the Present Age."

"The mere empiricist, who should undertake a description of the age, would seize upon some of its most striking phenomena, just as they

presented themselves to casual observation, and recount these, without having any assured conviction that he had understood them all, and without being able to point out any other connexion between them than their co-existence in one and the same time. The philosopher who should propose to himself the task of such a description, would, independently of all experience, seek out an idea of the age, (which, indeed, in its own form, *as idea*, cannot be apparent in experience,) and exhibit the mode in which this idea would reveal itself under the forms of the necessary phenomena of the age; and in so doing, he would distinctly exhaust the circle of these phenomena, and bring them forth in necessary connexion with each other, through the common idea which lies at the bottom of them all. The first would be the *chronicler* of the age; the second would have made a *history* of it a possible thing. . . . Thus, then, every particular epoch of time is the fundamental idea of a particular age. These epochs and fundamental ideas of particular ages, however, can only be thoroughly understood by and through each other, and by means of their relation to universal time. Hence it is clear that the philosopher, in order to be able rightly to characterize any individual age, and, if he will, his own, must first have understood *a priori*, and thoroughly penetrated into the signification of universal time, and all its possible epochs. The comprehension of universal time, like all philosophical comprehension, again presupposes a fundamental idea of time, an idea of a fore-ordered, although only gradually unfolding, accomplishment of time, in which each successive period is determined by the preceding; or to express this more shortly, and in more common phraseology, it presupposes a *world-plan*, which, in its primitive unity, may be clearly comprehended, and from which may be correctly deduced all the great epochs of human life on earth, so that they may be distinctly understood both in their origin and in their connexion with each other.”—*Fichte’s Characteristics of the present Age ; Smith’s Translation*, pp. 2-4.

This “world-plan” of Fichte, which, according to him, is to be excogitated *a priori*, and from which all the actual facts of history are to be deducible, corresponds, it will be seen, to the “clue” of Kant. Referring the proof of the proposition to the higher metaphysics, Fichte affirms his own idea of this world-plan in the following terms:—“*The end of the life of mankind on earth is this, that in this life they may order all their relations with freedom according to reason.*” This being the end of the life of mankind, it follows, he says, that that life divides itself into two parts—the one in which the end has not been yet attained, the other in which it approaches its attainment; and, proceeding farther, he divides the whole process of its gradual achievement, in other words, the whole life of the human species into five demonstrably necessary epochs, to wit:—1. “The epoch of the unlimited dominion of reason as mere unconscious instinct,”—*i.e.*, the age when the species, organized according to reason, and carrying reason, as it were, physically inherent in its very blood and veins, shall

yet act blindly, and not by a free-will choosing the reasonable ; 2. "The epoch in which reason, as instinct, is changed into an external ruling authority,"—*i.e.*, the age in which positive systems of life and doctrine, which cannot prove themselves, shall usurp and compel the blind obedience of mankind ; 3. "The epoch of liberation, *directly* from the external ruling authority, *indirectly* from reason as instinct, and *generally* from reason in any form,"—*i.e.*, the age of absolute lawlessness and indifference to truth ; 4. "The epoch of reason as science,"—*i.e.*, the age when mankind shall make the rules of reason their study ; and, 5. "The epoch of reason as art,"—*i.e.*, the age in which humanity shall completely and freely shape itself into a type of reason. According to this scheme of history, as necessitated *a priori*, it will be observed that reason is the eternal or stationary element, and freedom the element to be evolved in time. In other words, history is, according to Fichte, the problem of the identification of reason with freedom, or rather of the gradual transmutation of reason as a mere physical property, inherent in the human race, into reason as a conscious virtue. It may be added, that Fichte, calling to his aid an empiric verification, declares the present time to belong to the third of the foregoing ages, that is, to the middle and worst stage of the historic evolution.

What our Baconian readers will say to this bold attempt to prescribe on absolute or metaphysic grounds the course along which history must necessarily march, we can very well surmise ; nor are we disposed to withhold our sympathy when they protest against the incurable character of arbitrariness which must always attend such reasonings. Of the treatise, however, of which the foregoing scheme of history forms, as it were, the vertebral theory, we have to say, that it is worthy of any reader's best attention, not less from the really just and solid thoughts which it contains, and which, though made dependent by their author on the theory they illustrate, are yet independently impressive, than from the exemplary moral earnestness with which it is written, and which cannot fail to communicate itself to the reader. Besides, our impression is, that the main theory itself contains much that may very well stand good even when translated into the form of an induction from actual history ; if, indeed, there was not a larger exercise of empiric reference in the act of constructing the theory than the author was himself aware of. And, after all, at a time when there is such a disposition to allow man only such thoughts as accompany the process of generalizing empirically outwards from the human centre, there is health in every attempt, though it be but of the arbitrary philosophic imagination, to reverse this mental process, and to bring down out of the region of infinite contemplations, if not a

spark of transcendental light, at least new store of that primal sense of mystery wherein it is, as we believe, a condition even of scientific truth that the sciences themselves shall be shrouded.

Without tracing the farther development which the philosophy of history has received in Germany at the hands of Schlegel and Hegel, let us attend to one remarkable interposition in the course of that development made by the greatest of the German church-historians. The question must have already occurred to many of our readers, how this conception of history as a scientific evolution according to regular laws inherent in the very constitution of the species as such—a conception which, as we have seen, seems now to be an accepted fact among all general thinkers—is reconcilable with the belief in the altogether superhuman origin of Christianity. The transcendentalists, Kant and Fichte, of course, as well as the empiricist Comte, get quit of this difficulty by denying this superhuman origin, and including Christianity itself as a necessary portion of the general mundane evolution, divine only in the sense in which all is divine. The orthodox Christian, however, whose faith revolts from such a view, must seek another solution. To him also, if a man of philosophic culture, the fact that there is a science of history, that society *has* advanced and *does* advance according to regular laws inherent in its original constitution, is undeniable; he no more denies it than he denies that there is a science of the individual human mind, on account of the difficulty of reconciling this fact with the belief, which he independently holds, that the communication of grace to the heart of man is altogether a supernatural act. The difficulty, it will be observed, is precisely the same in both cases; and, as in the one case, it has not prevented Christians from accepting as possible a science of the human mind, and even being distinguished labourers in that science, so, in the other, it does not prevent them from accepting as possible and from cultivating a science of history. The solution they confide in is the same in both cases. As they believe the power of grace to be supernaturally communicated, and yet its essence to be in profound adaptation to the human constitution, and its operation in the heart to be in accordance with the ordinary mental laws; so, believing the origin of Christianity in the world to be altogether divine, they yet believe its adaptation to the needs of humanity to have been pre-established, and its incorporation with history to have proceeded according to the ordinary social laws. Such, at least, is the view promulgated, in opposition to the rationalism of his country, by the noble Neander. The following are almost the opening words in his *General History of the Church*:—

“ The history (of the Church) will shew how a little leaven, cast

into the mass of humanity, has been gradually penetrating it. Looking back on the period of eighteen centuries, we would survey a process of development in which we ourselves are included—a process moving steadily onward, though not in a direct line, but through various windings, yet in the end furthered by whatever has attempted to arrest its course; a process having its issue in eternity, but constantly following the same laws, so that, in the past, as it unfolds itself to our view, we may see the germ of the future which is coming to meet us. But, although the contemplation of history enables us to perceive the powers as they are prepared in their secret laboratories, and as they are exhibited in actual operation, yet, in order to a right understanding of all this, it is presupposed that we have formed some just conception of that, in its inward essence, which we would study in its manifestation and process of development. . . . Now, Christianity we regard not as a power that has sprung up out of the hidden depths of man's nature, but as one which descended from above, because heaven opened itself for the rescue of revolted humanity; a power which, as it is exalted above all that human nature can create out of its own resources, must impart to that nature a new life, and change it from its inmost centre. . . . But, although Christianity can be understood only as something which is above nature and reason, something communicated to them from a higher source, yet it stands in necessary connexion with the essence of these powers and with their mode of development—otherwise, indeed, it could not be fitted to elevate them to any higher stage; otherwise, it could not operate on them at all. And such a connexion, considered by itself, we must presume to exist in the works of God, in the mutual and harmonious agreement of which is manifested the divine order of the universe. The connexion of which we now speak consists in this,—that what has by their Creator been implanted in the essence of human nature and reason, what has its ground in their idea and their destination, can attain its full realization only by means of that higher principle, as we see it actually realized in Him who is its source, and in whom is expressed the original type and model after which humanity has to strive. And, accordingly, we see the evidence of this connexion whenever we observe how human nature and reason do, by virtue of this their original capacity, actually strive, in their historical development, towards this higher principle, which needs to be communicated to them in order to their own completion, and how, by the same capacity, they are made receptive of this principle, and conducted onward till they yield to it, and become moulded by its influence.”—*Neander's General Church History, Translated in Clarke's Foreign Theological Library*, pp. 1-3.

According to this view, the relationship of Christianity to the world is to be regarded as consisting in what Dr. Chalmers would have called a special *collocation* of the superhuman and the human—a pre-arranged contact, so to speak, between two

systems, the law of whose higher unity lies in the infinite purpose of the Divine Mind. And here, if anywhere, one must be aware of the miserable leanness and pedantry of all our conceptions of things got out of this vain analytic by which science necessarily proceeds, as compared with the awful sense of mystery that oppresses us when we give ourselves naturally up to the contemplation of the whole. If, considering the complexity of human nature, its wonderful and inexplicable activity in the living and glowing man, we are sometimes tempted to proscribe as useless all talk about laws, sequences, and the like, and are ever constrained at the last to take refuge in the fact, that all emanates immediately from vital energy and volition; how much more, in regarding the wonders of history, shall we find it necessary either to dismiss our petty Social science, with its mechanical jargon about natural laws, as a pretence and impertinence, or to take it strictly to heart that this science, with its jargon, is but a way of viewing the matter for occasional convenience, and that after all the old faith is still also the true one, that there is an indwelling Spirit of the ages and the worlds, whose will governs all things!

In England the notion of a Social science in any very determinate sense of the phrase, is extremely recent. Among our political writers, indeed, there have been men of real scientific generality, among whom no one deserves more particular mention than Edmund Burke. England, also, has partaken in the main in the development of political doctrine, which has gone on in France since the epoch of the French Revolution, and her contributions to the departmental science of political economy have been larger than those of any other nation. Nor ought it to be forgotten that the mere poetic instinct of many of our historical writers—the essence of the narrative art consisting in a perception of the fact of plot or evolution—has enabled them to produce works such as even the scientific critic must pronounce admirable. But in the appreciation of the fact that there is, and must be, a science of social as well as of any other kind of phenomena, England has certainly been later than either France or Germany. Dr. Arnold, for example, seems to have caught a glimmer of such a conception only towards the close of his life, when he was composing his course of General Lectures on Modern History. So far as we are aware, the first promulgation of the conception in England, in all its length and breadth, was made by Mr. John Stuart Mill, some years ago, in that part of his general work on Logic which is devoted to a disquisition on what the author calls the Logic of the Moral Sciences. Chapters VI.—X. of that disquisition may be still referred to as a repertory of thoughts on the subject.

Among the English works of more recent date in which the idea of a Social science is assumed and argued on, one of the most noteworthy is the "Social Statics" of Mr. Herbert Spencer. The title of this work, however, is a complete misnomer. According to all analogy, the phrase "Social Statics" should be used only in some such sense as that in which, as we have already explained, it is used by Comte, namely, as designating a branch of inquiry whose end it is to ascertain the laws of social equilibrium or order, as distinct ideally from those of social movement or progress. Of this Mr. Spencer does not seem to have had the slightest notion, but to have chosen the name of his work only as a means of indicating vaguely that it proposed to treat of social concerns in a scientific manner. This is to be regretted the more, because it would have been easy to convey the same intimation in a more appropriate title; as, for example, that of "Social Ethics." For, in reality, the work is a contribution to the philosophy of political right, an investigation into the nature and limits of the notion of duty, as it applies to the conduct of men in their purely social relations. So viewed, it deserves very high praise for the ability, clearness, and force with which it is written, and which entitle it to the character, now so rare, of a really substantial book. Were we here treating of the work as a whole we should have some exceptions to take to its doctrine as a work on social ethics; our criticisms, however, must be confined to a notice of what the work implies with respect to the author's views in social physics, that is, with respect to the theory he holds of the nature of the social development.

In this aspect, the point of view of the author may be summarily described as being that natural to a person whose intellectual habits have been formed chiefly by prior studies in the department of the more common English metaphysics, and in the department of political economy. It is in accordance with this, we think, that the work bears a certain perceptible resemblance to some of the writings of Proudhon; though Proudhon, whose metaphysical notions have been derived from the more profound school of Germany, and whose moral vehemence leads him far beyond the economists, writes in a style compared with which Mr. Spencer's is mild, and propounds conclusions compared with which Mr. Spencer's are timid and conservative. Mr. Spencer begins his work by an acute and satisfactory refutation of the doctrine of expediency as the ground of moral obligation. Adopting, as the only possible foundation of morals, the doctrine of a special moral sense, he proceeds, in a very ingenious manner, to inquire whether there is any one maxim or principle which may be regarded as the primary or fundamental revelation of this moral sense, and from which, as the specific propositions of

geometry from the geometric axioms, all the various forms of social duty may be evolved. Such a first principle he finds in the following definition of justice:—"Every man has freedom to do all that he wills, provided he infringes not the equal freedom of any other man." This, he says, is the sole law of the social relationship: whatever action or institution respects it, is socially right; and whatever action or institution infringes it, is socially wrong. There may, he admits, be other maxims of morality imposing limitations on the right of individuals to use the full personal liberty which the foregoing maxim would allow them—as, for example, it may be wrong for a man to get drunk, notwithstanding that he has, according to the foregoing maxim, full liberty to do so, if he pleases; these laws, however, if they exist, are only supplementary to the main one; they hold only as between individuals and the Supreme Being, and have no claim whatever to social recognition. The great primary principle, as it were, first chalks out a certain circle of liberties for each man, the measure of this circle being the demands of the personality of each as conditioned by the equal liberty of all others; whether the individual shall occupy the whole of this circle, or whether he shall restrain himself by certain additional rules of action, is a matter for his own consideration, with which society, as such, has nothing whatever to do.

This principle of Social Ethics, which is identical with one of the pervading doctrines of Proudhon, Mr. Spencer applies, at least by inference, to the criticism of history. So far as we can gather his views of history from the course of his remarks, it seems to be this—that the whole life of the species has been a gradual development, having for its end the final and triumphant recognition of the principle of equal rights. Hitherto, the principle has not been recognised; in the early portion of the history of our species, it was unknown or trampled on; physical force, tyranny, the sword ruled; individuals accumulated in their own hands the liberties of millions, and perpetuated the same abuse by unjust laws and institutions; and thus society has reached our time bearing in its bosom a mass of indurate wrong, legalized injustice, and organized oppression. This, like other forms of evil, has arisen from the fact, that the human race was not originally adapted to the *ensemble* of the conditions in which it was placed, but was left to work out such an adaptation in time. The process of adaptation, however, is going on; already for several generations there have been loud though vague assertions of the grand social principle of equal liberty; and the whole tendency of events is towards the rational promulgation and social victory of this principle. One form of this victory will be the ultimate abrogation of government both as a fact and as a

notion. For, as all civil government, all institutions for repressing crime, have originated in the disposition of men to infringe each other's liberties, when this disposition disappears, government will be unnecessary, and each individual will move as a self-regulated unit. In all this, Mr. Spencer but repeats the well-known cardinal speculation of Proudhon, whose notion also it is that history is an evolution of the doctrine of equal rights, and that the goal to which the human race tends is that of *anarchy*, or the absence of all forms of government. In the application of his principle, however, to the special institution or law of property, Proudhon goes a thousand miles beyond Mr. Spencer—denying the right of property altogether, while Mr. Spencer only denies the right of property in land.

Among the objections we have to the argument of Mr. Spencer's book, one of the strongest is this, that, at least in the special manner in which it is put forth, it seems to cast a cold and irreverent look over the whole past. Oppression, tyranny, extortion, wrong, the wholesale butcheries of ancient conquerors, the despotic exactions of feudal lords—such are the phrases in which Mr. Spencer's impressions regarding the past seem most naturally to take shape in his mind. Now, our convictions on this point have been already stated, and it only remains for us to say that these are so strong that, if any doctrine could be shewn necessarily to involve such a systematic depreciation of the past, we should instantly, and without farther inquiry, reject that doctrine as false and unscientific. We hate your men who are for ever telling you that Alexander the Great was a monster, and Cæsar a tyrant, and everybody else that used a baton or a battle-axe, a villain and a ruffian. We dislike even that milder degree of the same sentiment which Mr. Spencer shews when he repeats the commonplace complaint, that people erect monuments to the Napoleons and Wellingtons rather than to the Watts and Arkwrights of the human species. This is but trumpery talk, unworthy of a man of profound science. But we do not see, after all, that it is necessary to Mr. Spencer's theory of the human progress, according to every mode in which that theory could be understood. Although the law of equal social liberty may be the rule of the human species in the sense that it is the end towards which the human species tends and has been tending from the beginning, we do not see that our criticisms of special portions of the past should be soured by the sense that then the rule was neither attained nor hinted at. In any process having for its end a definite result, our rule of criticism, as the process goes on, should certainly consist at most in this question, How far is this or that part of the process a step towards the intended result? We do not despise a machine while it is being made, nor object

to a child because he is not yet a man. Even according to Mr. Spencer's own view, therefore, of the nature of the social development, we think his manner of speaking of the past needlessly irreverent. If an end is glorious, the evolution of that end, even had it no other merit than that of *being* the evolution of the end, is surely respectable. But Mr. Spencer's error is, that, attending exclusively to that element in the social progress the existence of which is a thing of evolution, namely, the element of freedom, he takes no account of the other element, the eternal reason, to use Fichte's phrase, which must be assumed as having been primarily inherent even in the unconscious and instinctive being, so to speak, of the human race. Fichte, in whose theory of history the development of conscious freedom figures as largely as in that of Mr. Spencer, is enabled, by this accompanying idea, to maintain and recognise for the past a higher title to reverence than that of having been a mere struggle towards the present and the future ; and hence his allusions to the actual course of the world in bygone times are warm with all a poet's feeling for the ancestral and the heroic. Comte, also, though occupying so different a point of view, has this singular merit of a large and unreserved appreciation of the dignity of the whole past.

There is another respect in which we think Mr. Spencer's views err against the most advanced conception of a Social science. His main principle, as we have already stated, is that society, as such, has nothing to do with the actions of individuals so long as these actions lie strictly within the circle marked out for each man by the requirement of non-interference with the freedom of his neighbours. Every man, so far as society is concerned, may do as he pleases, so long as he keeps within that circle ; and the only proper function of government, therefore, so long as the imperfection of men shall render government necessary, is to prevent men from selfishly going beyond their legitimate circles, and extending their own liberties at the expense of the liberties of others. That this principle, so peremptorily expressed, leaves a considerable difficulty behind it, Mr. Spencer seems to be himself aware—acknowledging, for example, that it is not easy to assent to the notion that society ought to let a man be a drunkard or any other kind of sinner he pleases, provided he maintains that character peaceably, and does harm, as the phrase is, to nobody but himself. But Mr. Spencer's hesitation in such cases does not arise from any doubt of the universality of his principle, but from the practical consideration that it is difficult to say in such cases that it does *not* apply ; difficult, for example, to be sure that the drunkard or other private sinner *is* doing harm to nobody but himself. Let the principle be clearly applicable, and he will carry it out to the

utmost. Thus, in discussing the rights of children, he pushes his idea of the equal freedom of all not only to the length of abolishing the supposed right of parental compulsion, but even, as the impression of most of his readers must be, to a length that would abolish all parental authority whatever, and entirely revolutionize the filial relationship. We suppose, too, that he would think it a legitimate consequence of his principle that suicide, and a number of other acts now punishable by law, should be removed altogether from the list of civil offences, and treated only as sins of the private conscience. Indeed, we do not see how he can stop short of authorizing the exposure of infants; for, unless there be a special enactment exempting children under a certain age from the operation of the principle of equal rights and entitling them to be treated under another principle, (a thing which Mr. Spencer himself ridicules,) we do not see what right a baby has to sustenance provided its mother wishes to break the mammary relation. The exposure of infants, therefore, though not their violent murder, would be socially legitimate. And lastly, Mr. Spencer distinctly asserts and contends for the right of every individual to ignore the State when he chooses—that is, to refuse obedience to the laws of the community in which he is enrolled, on condition, of course, of renouncing its privileges. There are, doubtless, many other curious consequences to which Mr. Spencer's principle would lead, for he intimates his knowledge that it involves very startling results; and though the mere contemplation of these results is, of itself, no refutation of the principle, it is right that in playing with such a dagger we should know the sharpness of its edges.

It is not in its aspect as an ethical proposition that we are to consider Mr. Spencer's principle. We will admit even that we see various directions in which a certain modified version of the principle might be advantageously put in practice. Possibly enough the doctrine of non-interference with individual action, except on definite grounds of social necessity or protection, has not yet been exhausted of all its useful applications even in free countries. But when we translate Mr. Spencer's principle into its necessary correlative form as a proposition in social physics, then, we believe, the inevitable dislike, if not horror, which the principle must produce in the quick common mind, when given as an ethical prescription, will be amply justified by its demonstrably unscientific character when stated indicatively. For what is the principle when so translated? Nothing less, so far as we can see, than a definition of society in the following terms:—Society is simply an aggregation of individuals, moving and acting each within a special circle, the circumference of

which is determined positively by the strength of the included personality, that is, by the absolute capacity of the faculties to exercise themselves, and negatively by the pressure of all the competing circles ; the sole problem of the social state is, therefore, the establishment of equal freedom by the rule of *Laissez-faire* for all the aggregated individuals ; and the laws of the social life are simply those of the mechanical co-existence of a certain number of human units. " The characteristics exhibited by beings in an associated state," says Mr. Spencer, " cannot arise from the accident of their combination, but must be the consequences of certain inherent properties of the beings themselves. True, the gathering together may call out these characteristics ; it may make manifest what was before dormant ; it may afford the opportunity for undeveloped peculiarities to appear ; but it evidently does not create them. No phenomenon can be presented by a corporate body but what there is a pre-existing capacity in its individual members for producing." Again he says, " Every social phenomenon must have its origin in some property of the individual." And again in combating Socialism, he observes that it could only be true if we existed in society " after the same fashion as those compound polyps, in which a number of individuals are based upon a living trunk common to them all ;" a theory which he believes no one would be absurd enough to hold. In this resolute representation of all social phenomena as taking their rise in the constitution of the individual man, Mr. Spencer is supported by Mr. Mill. " The laws of the phenomena of society," says Mr. Mill, " are and can be nothing but the laws of the actions and passions of human beings united together in the social state. . . . Men are not, when brought together, converted into another kind of substance, with different properties, as hydrogen and oxygen are different from water, or as hydrogen, carbon, and azote, are different from nerves, muscles, and tendons. Human beings in society have no properties but those which are derived from, and may be resolved into, the laws of the nature of individual man." It may be added that this view is natural to students of political economy,—the contests of this science for absolute commercial freedom having bestowed on its students a special clearness of vision with respect to the motions of the human unit or molecule, often, though not in Mr. Mill's case, prejudicial to their conceptions of society in the aggregate.

Now there is a great deal in this with which we cannot agree, though it is not perhaps easy to find language in which to express our difference. There is, it appears to us, something confusing in the terms in which Mr. Spencer and Mr. Mill state their belief that the phenomena of society are only the manifes-

tations of the human nature of individuals in a state of union. For, though the individual human being, as such, is conceivable to us, and though there are certain sciences which are concerned with the laws of purely individual human nature, yet, in point of fact, the individual human being is always thought of by us as a member of society. The individual man who is the object of our studies is always imagined as already existing in social relationship with other men; so that many of the phenomena which we set down as those of individual human nature, are in reality dependent for their existence on what Mr. Spencer calls the accident of social combination. In short, instead of representing society as built up of individuals, we may reverse the mode of thought, and represent individuals as the decomposed particles of society. In this sense, of course, it is true that the properties of the mass are the combined result of the properties of the particles, seeing that we have already implied in the particles the properties which they derive from belonging to the mass. But if we conceive the particles *per se*, if we first take for granted about human beings only as much as it is possible for us to conceive known about them as individual objects, then it is not true that the farther knowledge of what would result from the accident of their combination would be a mere work of logical inference. Were our knowledge of individual human nature in this sense as profound and accurate as it could possibly be, we could no more deduce thence the phenomena of associated human nature without the help of empiric observation of society than we could tell beforehand, from our knowledge of oxygen and hydrogen separately, that, when combined, they would form water. Instead of saying, therefore, with Mr. Spencer, that "the characteristics of beings in an associated state cannot *arise* from the accident of combination," and then patching up this proposition by admitting that "the gathering together may *call out* these characteristics," thus landing ourselves in a metaphysical controversy between *arising* and *calling out*, between the *cause* of a phenomenon which inductive science has nothing to do with, and the *conditions of the appearance* of a phenomenon which is what inductive science professes to ascertain; the true scientific mode of expression certainly would be, to say that the accident of combination generates new phenomena, and that therefore our knowledge of society as such has to be attained by distinct induction with respect to the social state, and not merely from our knowledge of human beings individually. In other words, the laws of the action of human beings in the mass are *not* logically resolvable into the laws of the action of human beings as individuals; and nothing can be possibly affirmed as completely true in the Social science from any theory, however correct, of individual

human nature. A committee, or a public meeting even, is something more than merely the sum total of the individuals that compose it. Wherever a few persons are gathered together for a common purpose, much more in political communities and nations, there is, we believe, the virtual creation of a new organization subject to new laws of life. The researches of Reichenbach and the animal magnetists, may yet throw some light on this subject, by investigating the phenomena of sociability; meanwhile, let the fact as we have stated it be distinctly comprehended. As far as the application of Mr. Mill's simile is fair, men when brought together *are* converted into another kind of substance with different properties, as water is different from hydrogen and oxygen, or as nerves, muscles, and tendons are different from hydrogen, carbon, and azote. The contrary can be maintained only by a confusion of conception equivalent to that which, first implying in hydrogen and oxygen all that we know of them in their combined form as water, should then assert that water is the same as hydrogen and oxygen, taking no account of the cardinal fact of the case, that of the chemical union; or which, first implying in hydrogen, carbon, and azote, all that is known of them in their organized form as nerves, muscles, and tendons, should then assert these nerves, muscles, and tendons to be merely the chemical substances aforesaid, omitting all consideration of the accident of organization. Or, not to avoid Mr. Spencer's challenge, we *do* believe that we "exist in society after the same fashion, to some extent, as those compound polyps in which a number of individuals are based upon a living trunk common to them all." Not only do men in society perform functions peculiar to them in that state, as for example, that of passing laws, condemning criminals and the like, but some of the phenomena presented by human beings in the mass are almost contradictory in appearance to those exhibited by human beings individually. We believe that there are cases in which communities and nations spontaneously do what is repugnant to the wishes of all their members, taken one by one—cases in which men maintain sternly in the gross, as by the compulsion of a social reason or conscience, principles of action which individually they deny or abandon. Vico seems to have had some such notion very clearly in his mind; and we believe it is absolutely essential to a correct conception of the Social science. Thus only, indeed, does Sociology take its place as the last independent member of the series of the inductive sciences, distant from pure biology by an equal scientific remove, as that by which biology is distant from chemistry, chemistry from physics, physics from astronomy, and astronomy from mathematics.

Fully to develop the importance of the notion we have thus

attempted to expound, would require more space than we have left. Among its consequences, as appears to us, would be a considerable diminution of value in that method of prosecuting the Social science, which Mr. Mill describes by the name of the Direct Deductive Method, that is, the method of directly inferring *probable* laws of society from the previously ascertained laws of individual human nature; and an enhanced regard for that other method, chiefly favoured by Comte, which Mr. Mill describes as the Historical or Inverse Deductive Method, that is, the method of first generalizing from actual observation of social phenomena, and then *verifying* the generalizations backward, as it were, by shewing their harmony with the known laws of the human mind. But our concern is chiefly with the effects of the notion on Mr. Spencer's speculations. The radical fallacy of these, it appears to us, consists in this, that they proceed on the supposition that society has no life, no purpose, no destiny as such, but is a mere numerical succession of individual existences. Hence, fixing his regard on the increase of the happiness of individuals, as the highest conceivable object for which the world can have been created, and having formulized the conditions of this happiness in the principle of equal rights for all, he constructs an ideal of society, whose highest principle is the rule of universal *Laissez-faire*. The whole problem of the Social state is, according to his view, to secure liberty to every individual to do as he pleases, so long as he does not infringe on the liberty of others to do as they please; and the sole purpose of government is therefore the negative one of repressing crime. Now our view is, in a great degree, the reverse of this. Society, as we believe, is not merely a device for the wellbeing of individuals; it has, we believe, an organic life, an ulterior destination, of its own; and it may sometimes even happen, we think, as in the case of a general war, that what is good and splendid in the social development, may not coincide with what is immediately beneficial for the individuals concerned in effecting it. Instead, therefore, of subordinating the laws of society to the ascertained personal interests of the individual, we would subordinate the laws of individual action to the ascertained conditions of noble social existence. Instead of regarding the polypidom as a mere invention to secure the rights of the polyps, we would regard the polyps as indentured servants to the higher being of the polypidom. How far Mr. Spencer's theory of equal rights for all, might even then hold good, and whether a theory of inequality of rights, of proportionality of rights to faculties, of a hierarchy of parts, might not be more tenable, we shall not now attempt to decide. Regarding his doctrine, however, of the right of the individual to ignore the State, we will say that we cannot assent to it; and that we hold that,

in case of an attempted secession of the kind, the State has a right, capable of a just definition, to pursue the discontented individual, to clutch him back to his place, and to make him, if not hold his tongue, (for toleration of speech may be an ascertained condition of advanced sociability,) at least pay his taxes. Again, with regard to the doctrine of the purely negative function of government, and its consequent evanescence in time, here also we take the other side. As society has a general will, reason, and purpose of its own, so, we believe, has it positive duties, and so ought it to have special organs of thought, expression, and activity. Institutions for social government are therefore, we believe, necessary facts in the being of the species ; and the cosmopolitanism of Kant, rather than the anarchy of Proudhon, (perhaps, in part, *through* it,) is the historic goal.

It is a consequence of the high degree of complexity which we thus attribute to the Social science, that we are not so sanguine as some in our expectations of the speedy perfection of a corresponding art of politics. But, as Mr. Mill remarks, a degree of knowledge which is very inadequate to the purposes of historic prediction, may be very useful for the purposes of political guidance. Already, we believe, Social science is in possession of a body of doctrines capable of beneficially directing the conduct of politicians. Nay, if it were but generally understood what the political art is ; if it were but generally understood that politics is not a hap-hazard wrestling with a heap of loose matter, but an art, the essence of which consists in so modifying existing social phenomena by the social free-will, that desired social ends may be accomplished through the spontaneous operation of the invariable social laws already established, we believe that the benefit would be immense. Were this understood now, many of our most admired political watch-words would cease to be pronounced, and many of our most conspicuous statesmen would have a place on the shelf among other lumber.

ART. II.—DÉMONSTRATIONS EVANGÉLIQUES ;—*de Tertullien, Origène, Eusèbe, S. Augustin, Montaigne, Bacon, Grotius, Descartes, Richelieu, Arnaud, De Choiseul-du-Plessis-Praslin, Pascal, Pelisson, Nicole, Boyle, Bossuet, Bourdaloue, Locke, Lami, Burnet, Malebranche, Lesley, Leibnitz, La Bruyère, Fénelon, Huet, Clarke, Duguet, Stanhope, Bayle, Le-Clerc, Du-Pin, Jacquilot, Tillotson, De Haller, Sherlock, Le Moine, Pope, Leland, Raciné, Massillon, Ditton, Derham, D'Aguesseau, De Polignac, Saurin, Buffier, Warburton, Tournemine, Bentley, Littleton, Fabricius, Addison, De Bernis, J. J. Rousseau, Para du Phanjhas, Stanislas I., Turgot, Statler, West, Beauzée, Bergier, Carraccioli, Jennings, Duhamel, Liguori, Butler, Bullet, Vauvenargues, Guénard, Blair, De Pompignan, Deluc, Porteous, Gerard, Diessbach, Jacques, Lamourette, La Harpe, Le Coz, Duvoisin, De la Luzerne, Schmitt, Poynter, Moore, Silvio Pellico, Lingard, Brunati, Manzoni, Paley, Perrone, D'Orleans, Campien, Perennes, Wiseman, Buckland, Marcel-de-Serres, Keith, Chalmers, Dupin Ainé, S.S. Gregoire XVI.* Traduites, pour la plupart, des diverses langues dans lesquelles elles avaient été écrites ; reproduites INTÉGRALEMENT, non par extraits ; annotées et publiées par M. L'ABBÉ M(IGNE,) éditeur des Cours Complets. Petit Montrouge. Paris, 1843.

SUCH is the title-page of this elaborate work, and we give it in full as a brief but comprehensive table of its contents. It is recommended in the "advertisement" as the best work on the truth of Christianity in general, and of Catholicism in particular, in the whole world ; and it is said to be specially distinguished by this, that the authors of the treatises included in it are not mere commentators or theologians, but writers of European reputation, (*des célébrités Européennes,*) who are esteemed alike by the men of the world and of the cloister, by the Protestant and the Catholic, by the Infidel and the Believer, as those who have been foremost in point of intelligence in their several ages and countries. But while it is designed for the general defence of Christianity, it is designed also for the special vindication of Catholicism ; and is directed not only against Infidels, who deny or doubt the truth of the one, but also against Heretics and Schismatics, who question the authority of the other. Every objection which has been urged against Christianity, as it is professed in the Church of Rome, is here refuted ; the objections of Pagan philosophy, by Origen, Eusebius, and Augustine ; those of the middle age and of the fifteenth and sixteenth centuries, by Bacon, Montaigne, and Descartes ; those

of the seventeenth century, by Bossuet, Pascal, and Nicole; those of the eighteenth, by Gerdil, La Harpe, and Milner; and those of the nineteenth, by Poynter, Keith, and Chalmers. And the value of the whole collection is said to consist in this, that each work is given ENTIRE, and that the series contains more than 150 volumes, translated from various languages into French, and constituting a complete body of Apologetic Theology. Its value is supposed to be greatly enhanced by the fact that the whole works of CARDINAL WISEMAN are incorporated in it, who is characterized as one of the most illustrious members of the Episcopate, and who is said to have furnished to the editor a copy of *all* his productions, revised and annotated by his own hand. The work is arranged in *chronological order*, and exhibits the various defences which have appeared from age to age in reply to the successive phases of unbelief, as the best method of exhibiting the progress of human thought, and the filiation and revolution of the various systems of opinion. The title-page of the first volume, however, was adopted provisionally, and every competent reader of the original *Avis* was invited to send in such suggestions as might occur to him, with the view of completing, by means of additional treatises, the outline of the plan which the editor had sketched. Accordingly, in the course of publication, a considerable change was made in the contents, as originally announced; *five* names which appeared in the title-page have been entirely omitted,—viz., Newton, Necker, Milner, Moehler, and Riambourg; partly because the translations of Milner and Moehler had not been completed in time, partly, also, because Riambourg's writings had not yet become public property, and those of Newton and Necker were found to contain, the one too much of the fanaticism of the Protestant, the other of the spirit of philosophy. But for these several other treatises have been substituted; and we are led to expect that in another work, of an analogous character, under the title of "*Nouvelles Démonstrations*," we shall be presented with a *hundred* additional apologists, both ancient and modern, Frenchmen and foreigners. From Italy we are to have Rosmini, Peraltì, Tassoni, Trombelli, and Valsecchi; from England—Lardner, Milman, Anderton, Beattie, Erskine, and Sumner; from Germany—Kühn, Goerres, Doellinger, Tholuck, Müller, Hengstengberg, Klee, Günther, Schlegel, and Drey; from France—Gauchat, Houteville, Lefebvre, François, Papin, Barruel, Regnier, Pontbriant, Beurier, and Bonhours. From the earlier ages of the Church we are to have Minucius Felix, Arnobius, Lactantius, and Theodoret; from the middle age—Anselm, Thomas, and Raymond Lulle; from the more modern era, Marsilius Ficinus, Savonarola, Du Perron, Vivès, De Mornay, Eckius, Cotton, and Morus.

We know few studies more interesting or more instructive than that of the History of Apologetics. As Christianity has come into collision with every successive system of error through the long tract of eighteen hundred years ; with the Pharisaism and Sadducism of the Jews ; with the popular paganism of Greece and Rome ; with the philosophical systems of Epicurus, Plato, and Zeno ; with the mythical theories of Porphyry, Jamblichus, and Julian ; with Mahommedanism in the East, and Infidelity and Rationalism in the West, it is impossible to conceive a more extensive or more inviting field of inquiry than that in which we trace the progress of its trials and triumphs when brought into conflict, at successive epochs, with so many and such formidable antagonists. But in this, as in every other department of theological science, the subject admits of being viewed from different stand-points, and of being treated in different ways. The method that has been most generally followed in this country, is that which is naturally suggested by *the different kinds of evidence* to which an appeal is made in defence or confirmation of our faith ; such as—the *presumptive* evidence, including the argument from Analogy, which is directed to the object partly of neutralizing preliminary objections, so as to relieve the subject of the weight of any adverse prejudice, and partly, also, of imparting to it such a character of verisimilitude, as may serve to awaken a sense of obligation to further inquiry ;—the *direct* evidence, including the *external*, the *internal* and the *experimental* evidence, and exhibiting the argument from the miracles, prophecies, and types of Scripture, with their historical verifications ; the argument from the characters of divinity, which are stamped on its whole contents, and from the confirmatory attestations of Christian experience ;—and finally, the *collateral* or subsidiary evidence, arising from tradition, monumental remains, and other similar sources, which shew that profane history itself is in accordance with the supposition that the Christian religion is true. Another method might be adopted in the treatment of the evidences of revealed religion ;—a method less scientific, indeed, in point of arrangement, but not, perhaps, less interesting or less impressive than the former—the method of exhibiting, in their proper historical order, a continuous series, or at least, a sufficient specimen, of the various defences and apologies which have appeared since the Apostolic age down to the present time. This is the method which has been preferred and adopted by the Abbé Migne and his associates. But even when the historical plan is pursued, there is still room, we think, for *a classification of the topics*, and there might be great advantage in availing ourselves of the aid of system which, in every other branch of inquiry, is found to be so useful and indispensable.

Were the subject treated, not chronologically, as in the present work, but in the order of *its relation to the various parties* with whom Christianity has had to contend, it might be conveniently divided into *four* parts: the *first* exhibiting an historical view of the JEWISH controversy, or of the arguments for and against Christianity, as stated by the advocates of Judaism on the one hand, and the apologists for Christianity on the other; the *second* exhibiting an historical view of the PAGAN controversy, or of the argument maintained by the primitive Christians against ancient heathenism, both in its popular and philosophical form; the *third* exhibiting an outline of the MAHOMMEDAN controversy, or of the argument maintained by the Church against the adherents of the false prophet; and the *fourth* exhibiting a view of the MODERN INFIDEL controversy, including both the argument against the DEISTS of the former, and the RATIONALISTS of the present age. In reviewing the history of these several branches of the great controversy, we shall find that, while there are both arguments and objections which belong peculiarly to each of them, and which impart to them their distinctive character, or constitute their more prominent features, there is also in all of them an evidence of a general kind, applicable at all times and in all circumstances, and available for the benefit of the Universal Church. The Christian apologists reasoned differently, in some respects, with Jews and with Pagans, with Mahommedans, with Deists, and with Neologians; for the principles assumed, or the facts admitted by these several parties, were not the same, and it was necessary to adapt their mode of argument, whether in the way of attack or of defence, to the peculiar opinions of those with whom they were immediately engaged; but notwithstanding this specific diversity, there is a body of positive evidence which is common to them all, and which constitutes the solid substratum of the Christian faith,—even that evidence which arises from the miracles and prophecies of Scripture, from its internal character and experimental verifications, and which is still available for the benefit of modern times, and will continue to be valid till the end of the world.

Christianity was *first* addressed to the JEWS, and it offered itself to them as a completion of the scheme which had been revealed in their own Scriptures. Some of them believed the Gospel; others rejected it, and were peculiarly zealous and active in opposing the progress of what they conceived to be an unwarranted and impious innovation on the religion of their fathers. Their opposition began during our Lord's ministry, and was continued under that of his apostles; so that we have in the New Testament itself the earliest authentic account of the

grounds of their unbelief, which are the same in substance, with some modifications, that are insisted on by their descendants at the present day. It would appear from the sacred narrative that, even during the short period of our Lord's public ministry, the question had assumed two successive shapes: at first it was merely, whether Jesus was a prophet sent from God? and for a time many seem to have been willing, like Nicodemus, to acknowledge him in this character on the strength of his impressive teaching and his amazing miracles; but afterwards, when he proclaimed himself as the Messiah that had been promised to their fathers, they were shut up to the alternative of either admitting this high claim, or of denying that he was a prophet at all; and hence those who expected and wished a temporal deliverer rather than a spiritual Saviour, treated him as an impostor, and ascribed his very miracles to Satanic agency. This seems to have been the mental process by which many who were willing at first to acknowledge his prophetic character were ultimately led to reject his claims. Had the question been, whether he was a prophet sent from God? they might have regarded his teaching and his miracles as a sufficient evidence in his favour; but when the question came to be, whether he was the Messiah of whom Moses and the prophets did write? another element must be taken into account, viz., the conformity between his character and work, and the descriptions of both which were contained in the Old Testament. And hence all the objections which are mentioned in the New Testament as having been raised against him during the course of his personal ministry are directed to this point, and designed to shew that he wanted some mark or other which was to be characteristic of the Messiah, and by which he should be identified when he came. In like manner, the great object of the Apostles in arguing with the JEWS, was just to prove that "Jesus is the Christ" by appealing to their own Scriptures, and shewing that all the predictions and types of the Old Testament had their true and complete accomplishment in him.

These remarks may serve to explain the *state of the question* as it existed in the Apostolic age. The unbelieving Jews did not deny the miracles of Christ, but conceived that if they could convict him by their own Scriptures of pretending falsely to the character of the promised Messiah, they might account for his miracles by ascribing them, as they did successively, to the power of Beelzebub, or the influence of magic, or to the mystic virtue of the Shem-hamphorash, the ineffable name. It is very remarkable that in their own account of the life of Christ—the *Toldoth Jeshu*—they never once deny his miraculous powers, but attempt merely to account for them by one or other of the

causes to which we have just referred. Their infidelity, then, rested on an intelligible ground: it may be traced to certain peculiarities in their hereditary opinions and expectations, which originated in an erroneous interpretation of the Old Testament, and it may thus be accounted for in perfect consistency with the admitted reality of those miracles which the Christians ascribed to God, the God of Truth, and the Jews to Beelzebub, the Father of Lies. It is not difficult to discover the original grounds of their objections to Christianity. The grand parent cause of their unbelief was undoubtedly that aversion to spiritual religion, and especially that repugnance to the essential doctrines of the Gospel which is natural to the human mind; but next to this, the cause which operated with the greatest efficacy was a prejudice induced by their education in the schools of the Scribes and Pharisees, who had put their own interpretation on some important parts of the Old Testament Scriptures, and who taught them to expect a very different Messiah from what they found in Jesus of Nazareth. There were several distinct topics on which the Christian scheme differed widely from their traditional opinions, and against these their objections were mainly directed. They had been taught to expect a temporal deliverer in the person of Messiah, a powerful prince, who should emancipate their nation from the thralldom of Rome, and re-establish the dominion of the house of David; whereas Jesus appeared as "a man of sorrows and acquainted with grief," in a state of poverty and humiliation, attended only by a band of humble fishermen. He proclaimed himself, indeed, as a prince, but only as "the Prince of Peace;" as a king, but as one whose "kingdom was not of this world;" as a Saviour, but as one who came "to save his people from their sins." They had been taught that the law and the institutions of Moses, established as they had been by Divine authority, were immutable and perpetual; and, looking rather to the letter than to the spirit of that economy, they regarded every alteration in its form as an impious attempt to supersede or to innovate on a constitution which had received the seal of God's miraculous attestation: whereas Jesus appeared, declaring, indeed, that "he came not to destroy the law but to fulfil," yet proclaiming also, that "the kingdom of God," a new and better dispensation, was at hand, and that "the hour cometh when neither in the mountain of Samaria, nor yet at Jerusalem, should men worship the Father, but all should worship him everywhere in spirit and in truth." They had been taught to regard themselves as standing in a peculiar relation to God, from which the Gentiles had been expressly excluded, and to believe that none could share in the blessings which belonged to the faithful, otherwise than by becoming proselytes to the

Jewish faith and worship ; but Jesus appeared, proclaiming his reverence for their religious services, yet predicting the abolition of their distinctive privileges, and the destruction of the Temple itself : and he was followed by his apostles, who announced the calling in of the Gentiles, without any of the forms of Jewish proselytism, and without even the preliminary of circumcision. They had been taught that their acceptance with God stood connected with the observance of their sacred rites, and might be secured by the works of their law : hence they gloried in their being the children of Abraham, and heirs according to the promise ; but Jesus appeared, declaring that the righteousness even of the Scribes and Pharisees could not entitle them to admission into the kingdom of God : and that another method of salvation, not by works but by grace, was announced in the gospel of his spiritual kingdom.

There were many other points of inferior moment, which gave rise to occasional controversy between the first Christians and the Jews, in those colloquial discussions which preceded the literary warfare on the subject ; but the topics which have been briefly indicated were the cardinal hinges on which the whole question turned in primitive times. At a later period, the Jews, while they retained and transmitted the old objections of their fathers, along with their comments on the life and miracles of the Saviour, were driven by the progress of events, and especially by the destruction of Jerusalem, the dispersion of their nation, and the continued disappointment of their fondly cherished hopes, to have recourse to other expedients, both for vindicating their own cause and assailing the credit of the Christian Church ; and their more *recent* grounds of objection may be described as consisting chiefly in the following particulars :—The prophecies which their earlier writers had usually described as Messianic, were otherwise applied, some to Hezekiah, others to the Jewish nation at large, so as to evade or invalidate the proof which Christians had derived from them in favour of the Lord Jesus Christ. The predictions, again, which were still acknowledged to be Messianic, were said to be suspended, or their fulfilment delayed, on account of their sins, and to wait for their accomplishment until the dispersed of Israel should return to God with their whole heart. Some of their writers, too, broached the idea of *two* Messiahs, the one a suffering, the other a conquering and victorious Saviour, endeavouring thereby to evade the argument from the fulfilment of ancient prophecy, both in the humiliation and exaltation of Jesus of Nazareth. They further endeavoured to invalidate the authority of the New Testament in a great variety of instances, and by most minute and captious criticism, by shewing that it is self-contradictory, as well as utterly at variance with the true

meaning of the Old Testament, on which it was professedly founded. And finally, after the corruption of Christianity, both in the Eastern and Western Churches, the Jews found a fertile, and, it must be owned, a well-founded ground of objection against Christianity as it was then exhibited, in the superstitions which had become incorporated with it, and especially in the idolatrous worship of saints and images, which they justly conceived to be at direct variance with the whole design and scope of the Old Testament, and with the express law of the Decalogue; and thus these flagrant corruptions served not only to weaken the Christian Church, but also to confirm the unbelief of God's ancient people, who did not discriminate aright between the system of Christianity as it is revealed in the New Testament, and the corrupt form of it which was embodied in the visible Church. These are the principal heads of the controversy between the Jews and Christians, first in primitive, and then in more recent times. On both sides, it has been partly *defensive*, and partly *aggressive*: the Jews having defended their own position, and assailed that of the Christians; while the Christians have vindicated the Gospel from Jewish objections, and assailed the Jews in their turn, by shewing the inconsistency of their tenets with the true meaning of their own Scriptures. In reviewing the whole course of this most interesting discussion, between the representatives of God's ancient people and the followers of Christ, we can hardly fail to be impressed with the feeling that the continued unbelief of the Jews, notwithstanding the disappointment of their long-cherished hopes, and the signal accomplishment of the Scriptures in their mournful experience, is a very awful phenomenon in the moral world; but it is one which should in nowise shake or stagger our faith: on the contrary, it is a signal proof of the Divine prescience by which it was predicted; and it should lead us to remove every stumbling-block out of their way, by reforming the abuses of the Church, while we wait in faith and prayer for the time when Israel shall be grafted in again, and when their conversion will add fresh evidence and impart new life to the Christianity of the whole world.

The literature of this *first* branch of the great controversy is peculiarly rich. It commences with the earliest Apologists; it is continued onwards from age to age, long after Paganism had been overthrown; it employed many pens amidst the darkness of mediæval times; and even at the present day, amidst the light and civilisation of the nineteenth century, it is neither obsolete nor unimportant. Any one who is disposed to study it as a distinct branch of the general subject, may consult with advantage a few standard works, produced at each of the

successive eras of its history: in primitive times, we have the dialogue of Justin Martyr with Trypho a Jew, and Origen's reply to Celsus, who personated a Jewish objector to Christianity: in the middle age, we have the "*Pugio Fidei adversus Mauros et Judæos*," written in the thirteenth century, and afterwards published at Leipsic with valuable prefaces by De Voisin and Carpzovius: at a later period, we have the "*Tela Ignea Satanae*," by Wagenseil, including amongst other curious pieces, the *Toldoth Jeshu*, or the Jewish account of the life and miracles of Christ; we have also the valuable work of Limborch, "*Amica collatio cum erudito Judæo*," (Dr. Orobius,) with the treatises of Kidder and Stanhope in the Boyle Lectureship: and in our own age, and for popular use, we have Charles Leslie's "*Short Method with the Jews*;" Dr. Greville Ewing's "*Essays addressed to the Jews, on the authority, the scope, and the consummation of the Law and the Prophets*;" and "*The Old Paths, or a Comparison of the Principles and Doctrines of Modern Judaism, with the Religion of Moses and the Prophets*," by Dr. Alexander M'Aul of Trinity College, Dublin. These works, read in connexion with Allen's "*Modern Judaism*," which gives an interesting account of their present opinions and observances, and with Dr. Owen's "*Preliminary Exercitations*," which contain a vast amount of information on the methods and artifices of Rabbinical exegesis, will be sufficient for the illustration of the *first* branch of Christian Apologetics.

The controversy with Judaism began during the personal ministry of our Lord; it was speedily followed by the *Pagan* controversy, when, under the ministry of his Apostles, Christianity was openly proclaimed to the Gentiles as well as to the Jews. The history of this *second* branch of the subject is deeply interesting; it leads us to contemplate the progress and triumph of Divine truth, proclaimed by a few fishermen and tentmakers, in opposition to the learning, and policy, and power, of the greatest empire that ever existed in the world. We must endeavour to conceive of the grandeur and gorgeousness of that system of superstitious worship which then prevailed, if we would estimate either the difficulty or the value of the triumph which Christianity achieved. It was a system of Polytheism, universally diffused and firmly established: tolerant of all forms of religious observance, and of every variety of religious creed, one only excepted,—a system which had been the gradual growth of centuries,—which priests had hallowed, and poets celebrated, and princes patronized: a system defended by the policy and power of the Roman Empire, and associated with the prejudices and habits, the affections and interests, the very pastimes and passions of the people: a system

which statesmen upheld as a convenient engine of government; which philosophers might inwardly despise, but would not openly assail; and to which the veriest sceptics offered the homage of outward respect and observance. In the words of Gibbon,—“The policy of the emperors and the Senate, as far as it concerned religion, was happily seconded by the reflections of the enlightened, and by the habits of the superstitious part of their subjects. The various modes of worship which prevailed in the Roman world were all considered by the people as equally true, by the philosopher, as equally false, and by the magistrate, as equally useful: and thus toleration produced not only mutual indulgence, but even religious concord. The superstition of the people was not embittered by any mixture of theological rancour; nor was it confined by the chains of any speculative system. ‘The devout Polytheist, though fondly attached to his national rites, admitted with implicit faith the different religions of the earth.’ ‘Such was the mild spirit of antiquity, that the nations were less attentive to the difference than to the resemblance of their religious worship.’ Notwithstanding the fashionable irreligion which prevailed in the age of the Antonines, both the interests of the priests and the credulity of the people were sufficiently respected. In their writings and conversation, the philosophers of antiquity asserted the independent dignity of reason, but they resigned their actions to the commands of law and of custom. Viewing with a smile of pity and indulgence, the various errors of the vulgar, they diligently practised the ceremonies of their fathers, devoutly frequented the temples of the gods: and sometimes condescending to act a part on the theatre of superstition, they concealed the sentiments of an Atheist under the sacerdotal robes.”* Such is the modern sceptic’s glowing picture of ancient Paganism: yet, suddenly a few fishermen appeared in an obscure corner of the Roman Empire—they preached, and with no power, excepting that which accompanied their word, their doctrine spread, and spread the wider and faster by reason of persecution and martyrdom, until that old, established, and gorgeous superstition fell, like Dagon before the ark of the living God.

The Pagan controversy was in some respects widely different from the Jewish. With a few inconsiderable exceptions, the Gentiles had no previous knowledge of the character and will of the true God as these had been revealed to the Jews in the Old Testament Scriptures: they held principles, or rather were preoccupied with prejudices, of a directly opposite kind. It was necessary, therefore, to reason differently with them, and

* Gibbon’s *Decline and Fall*, vol. i. p. 41.

to direct their thoughts in the first instance to the fundamental truths of a pure Theism, and the flagrant errors of their favourite superstitions. Accordingly, we find in the New Testament, which contains the earliest information on the subject, that the Apostles reasoned with the Gentiles in this way; as when Paul stood on Mars' Hill, and addressing the cultivated inhabitants of Athens, exclaimed, "Ye men of Athens, I perceive that in all things ye are exceedingly given to the worship of the Gods, (ὡς δεισιδαιμονεστέρους ὑμᾶς θεωρῶ, Acts xvii. 22;) for as I passed by and beheld your devotions, I found an altar with this inscription, TO THE UNKNOWN GOD. Whom therefore ye ignorantly worship, HIM declare I unto you. God that made the world, and all things therein." "In Him we live, and move, and have our being; as certain also of your own poets have said, For we are also his offspring. Forasmuch, then, as *we* are the offspring of God, we ought not to think that the Godhead is like unto gold, or silver, or stone, graven by art or man's device." This is a beautiful specimen of the primitive argument against Paganism. The question, however, assumed several distinct shapes in the subsequent history of the Church. In its earliest stage it was simply a question as to the claims of Christ as the founder of a new religion, or as the object of religious worship; and had the Apostles contented themselves with merely urging these claims, without denouncing the creeds and customs of Polytheism, there seems to be no reason to doubt that multitudes who were ready to welcome any new system which commended itself to their taste, might have consented to give Christ a place in the Pantheon, and Christianity full and ample toleration in the empire. But the very genius of Christianity forbade such an alliance: it was essentially and directly opposed to Paganism in all its forms—it admitted of no compromise, and could not speak to error in the language of conciliation; and as soon as its true character was discerned, the controversy assumed a new and more formidable aspect. At this second stage, the prejudices and passions of the people combined with the policy and power of government to put down Christianity by persecuting its disciples, not because Christianity professed to be a true and good religion, for this many might have been willing to concede, but because it professed to be *the only* religion that was pleasing to the one living and true God. Hence "the mild and tolerant spirit of Paganism," which could endure and even protect and establish every form of superstitious worship, was converted at once into a spirit of persecution. This was the age of martyrdom, and the arguments of the first Christians were sealed with their blood. As persecution waxed hotter, the controversy became, on the side of the Christians, rather an assault on

Paganism than a defence of Christianity; the courage of the martyrs rose as their danger increased, and they boldly attacked both the superstitions of the common people and the philosophical systems of the more refined advocates of the established worship. A *third* stage arrived, when the opposition which had hitherto been made to Christianity by the brute power of the mob or the magistrate, was embodied in writings designed partly for the vindication of the ancient system, and partly for the conviction and exposure of the Christians. Various charges of a most heinous and offensive nature were preferred against them, charges which, if they had been true, might have justified the interference of the Government in crushing an immoral and unsocial abomination; and the Christians replied in self-defence, renewing, at the same time, their solemn protest against Paganism as a false and debasing superstition. This was the era of the Apologists, whose writings, often addressed to the Roman magistrates and emperors, were mainly directed to disprove the accusations which had been brought against them. The *last* stage of the controversy arrived, when the defenders of Paganism, driven from many of their ancient strongholds, and no longer able to defend the old superstitions in their naked grossness, had recourse to an allegorical explanation of them, contending that they were designed to represent the principles and processes of physical nature, and that, when thus interpreted, they contained the maxims of a hidden wisdom. They had recourse, too, to another expedient—that of writing the lives of their great men, such as Apollonius of Tyana, and setting them up as rivals to Jesus Christ. The extant remains or reputed opinions of Porphyry, Jamblichus, and Julian, throw an interesting light on this phase of the great argument.

But Paganism was doomed; the breath of the Lord had smitten it, and neither the power of the empire, nor the prejudices of the people, nor the artifices of the priests, nor the plausible sophistries of a pliant philosophy, could save it; it fell before an humble band of Galilean preachers, and now, throughout the whole extent of Europe, it lives only in the classic page.—“Stat nominis umbra.”

For a full view of the controversy, which issued in the downfall of ancient Paganism and the public establishment of Christianity, recourse must be had to the early Apologists—to Justin Martyr, Tertullian, Clement of Alexandria, Origen, Minucius Felix, Arnobius, Eusebius, and Augustine. In the “*Démonstrations Evangéliques*,” several treatises belonging to this era are given entire in a French version, viz., TERTULLIAN’S “*Apologeticus adversus Gentes pro Christianis*,” and also (for a special reason which will be noticed afterwards) his “*Liber de Pre-*

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The conflict with ancient Polytheism had scarcely terminated, when there arose in the East a new and formidable antagonist to Christianity, which, unlike Paganism, loudly proclaimed the unity of God, and admitted generally the truth both of the Old and the New Testaments, while it proposed a new and authoritative revelation from Heaven. Christianity had already become corrupt or lethargic, and MAHOMET was sent as a scourge to the Eastern churches. “With the sword in one hand, and the Koran in the other,”* he speedily obtained a complete mastery over extensive and populous regions, and established an almost insurmountable barrier against the progress of gospel truth. Yet Mahomet and his followers were not unbelievers, in the ordinary sense of the term ; they recognised both Moses and Christ as true prophets ; and the Koran itself contains innumerable refer-

* Gibbon’s *Decline and Fall*, vol. ix. pp. 192, 224. (12mo.)

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ences to the facts and doctrines both of the Old and the New Testaments. It is, in fact, founded on these earlier revelations, and professes to be supplementary to them; but it speaks not only of the corruption of the Christian churches, it speaks also of the corruption of the sacred writings; and Mahomet is described as the Paraclete or comforter whom Christ promised to send, after his ascension, to guide his disciples into *all truth*. It contradicts the received Scriptures, both in regard to some matters of fact, and to several important points of faith and practice; but, speaking generally, it does homage to the great facts on which the Jewish and Christian religion are based. Its brief but comprehensive confession of faith may be summed up in two articles, which are described by Gibbon as "an eternal truth and a necessary fiction;" that THERE IS ONLY ONE GOD, AND THAT MAHOMET IS THE APOSTLE OF GOD.

Propounded as it was to rude and ignorant tribes, many of them still practising the rites of Sabeian worship, and offering their homage to the sun, moon, and stars, as well as to departed but deified heroes, and published at a time when the Christian Churches in the East had fallen into corruption and decay, it excited opposition, as every innovation in religion must,—but this was speedily quelled, not by spiritual but by carnal weapons. We have fragments of colloquial debate and discussion during the life of Mahomet, which are incorporated in all the authentic histories of his singular career, and which are sufficient to shew that his revelations were not at first received with implicit credence: but we have no record of any literary controversy on the subject until a much later period, when the claims of a system, already firmly established by force, began to be canvassed at the bar of reason. The translation of the Koran by Sale, with his introductory dissertations; and the writings of Pococke, Reland, Prideaux, and Boulainvilliers, may be consulted with advantage on its earlier history: but more recent works must be referred to if we would understand fully the precise state of the question as between the Christian and Mahommedan faith. This branch of the general controversy is often regarded as one of very subordinate interest, and as having little claim on the attention of students: and it is true, so far, that we are less in danger from the claims of the false prophet, than from the cavils and objections of infidels within our own borders. But there are at least *two* considerations,—the one of a general, the other of a more special kind,—which may serve to vindicate the claims of the Mahommedan controversy to the careful study of the more inquiring members of the Christian ministry:—the *first* is, that it serves, in the way of contrast, to enhance the strength and value of the Christian evidence, by shewing how difficult, or

rather how impossible it is for any scheme of imposture to *simulate* an evidence of the same or of a similar kind; and by exposing the shifts and expedients to which, in the absence of that evidence, every impostor, however fanatical, must necessarily be reduced. The *second* is, that if it be not necessary for all, it is indispensable at least for our missionaries in the East, to acquire a thorough knowledge of the arguments *pro* and *con* as between the advocates of the Christian and Mahommedan faith; since they must necessarily come into frequent intercourse with the followers of the false prophet, and they will find, that of all the opponents of Christianity, they are the least ready to be convinced or impressed by the preaching of the Gospel. On this subject, we refer to a very curious collection of papers recently published by Dr. Lee, Professor of Arabic at Cambridge, entitled, "Controversial Tracts on Christianity and Mahommedanism, by the late Rev. HENRY MARTYN, and some of the most eminent writers of Persia." In a very long and learned Preface, Professor Lee gives "some notices and extracts from the controversy, as it existed prior to the times of Mr. Martyn,"—especially from three books, "one composed in the Persian language by Hieronymo Xavier, a Catholic missionary: another, containing a reply to Xavier's work, by a Persian nobleman named Ahmed Ibn Zain Elébidin, written also in the Persian; and the third a rejoinder in Latin, by Philip Guadagnoli, one of the Professors attached to the College *de propaganda fide*, in defence of Xavier's work." In the first of these treatises the elementary principles of Theism are inculcated at the outset, in opposition to the Eastern doctrines of Pantheism and Absorption: then the peculiar doctrines of Christianity, such as the doctrine of the Trinity, and original sin, are expounded; and, finally, the contrast between the Christian and Mahommedan faith is illustrated in a variety of distinct particulars. All this, however, is intermingled, as might have been expected, with doctrines peculiarly Popish; such as the worship of images, and the virtue of sacred relics, the religious observance of saints' days, and the temporal and spiritual power of the Popes. In the reply of the Persian nobleman there is not a little of acute ingenious pleading, founded on the contents of the New Testament itself. He attempts to shew that our Lord's warning against false prophets does not apply to Mahomet, whose advent had been predicted, as well as that of Christ, in the earliest Scriptures—the Pentateuch; for the words, "a light came from Mount Sinai," apply to Moses; and the words, "it shone upon us from Mount Seir," apply to Christ, who spoke from Seir in Galilee: and the words, "it was revealed to us from Mount Paran," apply to Mahomet, who spake from Mount Paran, in the neighbourhood of Mecca. He farther attempts to shew, that

Christ's teaching was as much opposed to that of Moses as Mahomet's was to that of Christ, and that we are shut up, either to the impartial rejection of both, or the admission of their respective claims. He argues, too, with all the subtlety of a European critic, quite, indeed, in the vein of Strauss and his compatriots, on the discrepancies of the sacred narrative, and is quite as decided, and as *rational* too, as any Socinian in denying the divinity of Christ, and denouncing the doctrine of the Trinity. The defence of Xavier by Guadagnoli, which is dedicated to Pope Urban VIII., and which bears upon it the approbation and *imprimatur* of the sacred college, is divided into *four parts*, corresponding to the four principal heads of objections by the Mahomedans; the first relating to the sacred mystery of the Trinity; the second, to the ineffable sacrament of the Incarnation; the third, to the authority of the sacred writings; and the fourth, to the Koran, and the claims of Mahomet as a legislator. The controversy between the saintly *Henry Martyn* and the Mahomedans commenced in 1811. Mirza Ibrahim, the preceptor of all the Moolas, was the writer of a book in defence of Mahomedanism, which appeared on the 26th of July. "A considerable time," it is said, "had been spent in its preparation, and on its seeing the light it obtained the credit of surpassing all former treatises upon Islam." Henry Martyn's biographer says that his reply to it was divided into two parts—the first devoted principally to an attack upon Mahomedanism; the second intended to display the evidences and establish the authority of the Christian faith. Professor Lee, however, divides it into three parts, and offers first a translation of the Arabic tract of Mirza Ibrahim, in defence of Islamism, with an appendix, containing an extract from the tract of Aga Acber, on the miracles of Mahomet; and then the translation of the first, second, and third tract of Mirza Ibrahim, by Martyn, with the rejoinder of Mohammed Ruza in reply, and a copious criticism by the editor and translator. We have referred to this work as affording the best exemplification, accessible to us, of the state of the Mahometan controversy in the present age; and we cordially agree with Professor Lee in thinking, "that the general attention that has of late been paid to missionary exertion, both within and without the pale of the Church of England, constitutes a farther motive to the prosecution of these studies; and that without an extensive cultivation of them, there is not much reason to anticipate the success to which it is their object to attain."

The more modern controversy between Christianity and unbelief falls to be divided into two parts—the Deistical and the Neologian.

The revival of letters, and the reformation of the Church, aided by the invention of printing, and the general progress of civilisation, produced an active and restless spirit of inquiry in Europe, while the offensive and intolerable corruptions which had infected the visible Church gave rise in many minds to a deep-seated, heartfelt prejudice against Christianity itself. The right of private judgment, which had been violently wrested from men, and as violently redeemed, was no sooner restored than, by a natural reaction, it sought to revenge itself on those by whom it had been forcibly enchained. And the *fourth* great controversy between Christianity and the spirit of unbelief, was *occasioned*, more or less directly, although it cannot be said to have been *caused*, by that great revolution in the public mind of Europe.

There is a striking difference between the ancient Pagan and the modern Deistical controversy. In the former, the advocates of Christianity were called to expose the absurdities and immoralities of Polytheism, which had become, under the unaided light of nature, the universal religion of mankind: in the latter, they were met with the plea that Revelation was unnecessary, and therefore incredible, by reason of the *perfect sufficiency of the light of nature*, and the purity and perfection of the religious system which it was able of itself to establish in the world. What had occurred, it might be asked, in the ages which intervened between the two to account for, or to justify so great a change in the state of the question? Had human reason excogitated for itself a system of pure and perfect Theism? or had she derived from Christianity a new view of nature, and decked herself out in borrowed plumes! The Bible, as God's own commentary on his works, throws a flood of light on the constitution of Nature, and on the course of Providence: it appeals above all to the conscience, and rouses it into vigorous action; and thus, even where its heavenly origin is doubted, or its peculiar doctrines despised, it may operate powerfully in producing both a purer Ethics and a more perfect Theism, than had ever been attained to through the unaided light of nature; and on the ground of this very benefit,—a secondary and derivative result of revelation, the pride of man's reason may found an argument to shew that Natural Religion is all-sufficient, and supernatural teaching superfluous. Now that reason was recognised as a rightful inquirer, she must forthwith arrogate the functions of an arbiter, and the authority of a judge: she must deliberate on the *reasonableness* of every article of faith, and receive or reject it without reference to *authority*, whether human or Divine; and thus, instead of sitting down meekly as a scholar, she must exalt herself as a superior, and man's folly must give or deny its sanction to

the wisdom of God. This fatal principle,—so different from that of the mere right, or rather the moral duty of private judgment,—led as a necessary consequence to the rejection of the peculiar doctrines of the Gospel ; for these doctrines which constitute the characteristic features and the very essence of real Christianity, are alike offensive to carnal reason, and opposed to the corrupt passions of men ; they must, therefore, be discarded as “ foolishness,” and those lessons of Scripture must only be retained which commend themselves to the unrenewed mind. Hence the Deism of Lord Herbert ; hence the meagre heresy of Socinus ; and hence also the monstrous Neology of Germany.

But this controversy also has assumed various shapes, and passed through several successive stages. Sometimes it has deified Nature and denied God—not only as the revealer of supernatural truth, but also as the creator and governor of the world ; and in this form the system of Pantheism, idealistic or material, is substituted for the religion of the Bible, as in the writings of Spinoza and Comte. Sometimes it has decried reason and undermined all the principles of human belief ; and in this form a withering and dreary scepticism takes the place of a simple and confiding faith, as in the writings of Montaigne and Hume. Sometimes it has attempted to establish a system of pure Theism, on the ground of natural evidence and without the aid of revelation ; and in this case, a cold and lifeless form is substituted for the vital spirit of Christianity, as in the writings of Herbert of Cherbury. On this important branch of the great controversy, we possess an invaluable treatise in Dr. JOHN LELAND’S “VIEW of the principal Deistical Writers that have appeared in England in the last and present Century ;” a work which states the views, and answers the objections of Herbert, Hobbes, Blount, Toland, Shaftesbury, Collins, Woolston, Tindal, Morgan, Chubb, Hume, Bolingbroke, and some other anonymous writers, and gives an account of the various answers which were published against them at the time when their writings appeared. The “*Démonstrations Evangéliques*” furnish a useful supplement to this important work, by making us acquainted with a considerable number of Continental writers, whose works are not so generally known in this country, and whose views, although somewhat different from those of the Protestant defenders of Christianity, are often such as to contribute both strength and ornament to the same august and noble cause.

The Deistical controversy in England had a closer connexion than may at first sight appear, with the rise and progress of Rationalism in Germany. For, whether we accept the testimony of the “Tracts for the Times,” “that the Rationalism of Germany was occasioned in good measure by the importation of

deistical books and opinions from England—books and opinions which England herself had rejected ;” * or the somewhat contradictory testimony of Dr. Pusey, “that the constant appeal to the *rationality* of Christianity, which led Tindal to conceive of it as a mere republication of the religion of nature, was extremely encouraged in Germany by the translation of the works of *the earlier English apologists* ;” †—in either case a connexion is established between the two great phases of English and German infidelity ; and such a connexion as proves the filiation of the one from the other. The supposed “reasonableness of Christianity” led some, in the first instance, to explain away all that was peculiar to the Gospel, or offensive to the natural mind ; and when this attempt was found to be too arduous, it was succeeded by the theory of myths, which essayed to account for every fact or doctrine of Scripture on purely natural principles. The history of this portentous aberration of reason is sketched by Amand Saintes, in his “*Histoire Critique de Rationalisme en Allemagne* ;” ‡ and its leading principles are well discussed in the “*Etudes Critiques sur le Rationalisme Contemporain*,” par L’ABBÉ H. DE VALROGER.” § In its earlier development it is illustrated by Mr. Rose and Dr. Pusey ; in its latest it is embodied in Strauss’s *Leben Jesu*, which has been answered by Neander, Tholuck, and others, a specimen of whose arguments is given in Dr. Beard’s “*Voice of the Church*.”

We have thus briefly sketched the outline of a comprehensive course of study in the department of Christian apologetics ; and we think that some such arrangement of the various topics of that complex theme as we have ventured to indicate might be adopted with great practical advantage. Before leaving the subject we may add, that besides the “*Discours Historique et Critique*,” by the Abbé Houteville, to which we have already referred, the history of apologetic literature has been written in German by *Tschirner*, (*Geschichte der Apologetik* ;) that Dr. Gerard of Aberdeen has exhibited a succinct but comprehensive “*View of the Controversy concerning the Truth of Christianity*,” in his *Compend of the Evidences* ; and that the student will find an excellent guide in the “*Delectus Argumentorum et Syllabus Scriptorum qui Veritatem Religionis Christianæ adversus Atheos, Epicureos, Deistos, seu Naturalistos, Idololatros, Judæos, et Muhammedanos lucubrationibus suis asseruerunt*,” by J. A. Fabricius.

The voluminous, and in some respects valuable work, whose title stands at the head of our Article, has not been framed according to the method which we have described. The editor,

* Tracts for the Times, No. 57, p. 8.

† Dr. Pusey on the Theology of Germany.

‡ Paris, 1841.

§ Paris, 1846, pp. 912. 8vo.

following no other order of arrangement than that of mere chronological succession, and guided in his selection of the treatises which should be inserted simply by his own views, or by the advice which he received from others, in regard to what might be best suited to the wants or tastes of the present age, has presented to the public a translation of a large number of volumes and tracts, generally well executed, and often accompanied with valuable literary notices, both of the authors by whom they were severally written, and of the various discussions to which they gave rise. The work, however, can only be regarded as a store-house of materials for the construction of a system of apologetics—a store-house which is peculiarly rich and full in the department of the more modern Continental treatises, but comparatively meagre in that of the earlier apologists. The plan of publishing the entire treatise, in every instance, which is generally followed, cannot be too highly commended; and we are only the more confirmed in this opinion by several instances in which the editor has departed from it, as in the case of Montaigne, Boyle, and Nicole. The editor and his accomplished associates deserve our thanks for the intellectual banquet which they have prepared for us; the viands are so good, and at the same time, as we are assured, *so very cheap*, that they might have been safely left to commend themselves; and surely it could scarcely be necessary to introduce such a work to the only class of readers who are at all likely to relish it, by the following astounding *gasconnade*—“Nous ne craignons pas de dire de cette publication qu'elle est, sans contredit, sur la vérité du Christianisme en général, et du Catholicisme en particulier, l'ouvrage le plus fort qui existe dans le monde entier.” “Nous ne craignons pas d'avancer que celui qui posséderait bien *nos Démonstrations*, pourrait à bon droit faire dire de lui à tout adversaire, *Timeo unius libri virum*; et si, dans nos temps de scepticisme, de doute et d'indifférence, quelqu'un, laïque ou prêtre, se trouvoit condamné à n'avoir qu'un seul ouvrage en sa possession, *nous lui conseillerions volontiers de donner, après les saints livres, la préférence à nos Démonstrations!*”

The work thus highly extolled is liable, in our opinion, to at least one very grave and serious objection. It is avowedly a defence of Christianity in general, and of Catholicism in particular; and hence, while the writings of Bacon, Grotius, Boyle, Locke, Burnet, Leslie, Clarke, Tillotson, Sherlock, Leland, Chalmers, Keith, and many other Protestants, are laid under contribution for the general defence of Christianity, those of Bossuet, Bourdaloue, Fénelon, Bergier, Gerdil, and above all, of Wiseman, are added not only in defence of the same cause, but also in support of the peculiar doctrines and claims of the Church

of Rome, which the former class of writers would have indignantly denounced as flagrant corruptions of "the faith once delivered to the saints." We do not accuse the editor or his associates of *mala fides* in this, for the plan of the work is boldly announced at the outset, and we are frankly told that the writers have been purposely selected, on the principle of providing for two distinct objects:—That "the one half of them might demonstrate Christianity, in opposition to doubters and infidels of all sorts, and the other half might compel all heretics to rush into the arms of Catholicism as their only safe resting-place. Nor are we prepared to say that every allusion to the distinctive principles of the Church to which the writer belongs is forbidden by the laws of legitimate controversy. But we do most seriously protest against any attempt to make Christianity responsible for the errors and corruptions of the Church of Rome, or to throw the *onus* of defending the spiritual and temporal supremacy of the Pope, the doctrine of Transubstantiation, and the worship of saints and images, on her apologists. We hold that these doctrines and rites constitute no part of genuine Christianity; and we know of nothing more fraught with danger to the sacred cause, than any attempt to mix them up with the faith which we are concerned to defend. What can be more revolting to reason, or more inconsistent with the testimony of our very senses, than the figment of Transubstantiation? or what better fitted to strengthen the prejudices of worldly men against religion, as if it were the product of mere priestcraft, than the arrogant pretensions of the Pope and his hierarchy? And what more grievous stumbling-block to the surviving representatives of God's ancient people than the apparent idolatry of the Church of Rome? Yet all these obnoxious tenets and observances are blended in this work with the great truths of natural and revealed religion, and placed, in point of evidence and authority, precisely on the same level; as if Christianity could not exist or could not at least be proved without the recognition of what every Protestant abhors and abjures: and this, too, while the Christianity of Bacon, and Locke, and other Protestants, is largely insisted on, and their writings are laid under contribution in aid of the sacred cause. There is in our mind a manifest and glaring inconsistency in the procedure of the learned Abbé and his assistants in this matter. We have, on the one hand, a formal recognition of the personal Christianity of such Protestant writers as Bacon, Boyle, Grotius, Newton, and Clarke; and yet we have, on the other, an equally explicit denial of their claim to be regarded as members of the one true Catholic Church. They were Christians, and sincere Christians too; nay, they were able and valiant defenders of the common faith of Christendom, insomuch that even the Papacy

itself has not scorned their aid in constructing a body of apologetic theology : but they were Protestants, and as such separated from the pale of that Church which claims a monopoly of salvation. They “ were aliens from the commonwealth of Israel, and strangers to the covenant of promise.” Surely the learned Abbé must see that, if real personal Christianity may exist in a state of separation from the Church of Rome, the exclusive claims and arrogant pretensions of that Church are not a little preposterous. And yet, while it is admitted that Bacon was profoundly versed in the knowledge of Scripture, and that it was a delightful task to collect the fragments which serve to shew the profound religion of that great man, (*la religion profonde de ce grand homme,*) while the personal piety of Boyle, Newton, Stanhope, and many more, is explicitly declared, we are nevertheless assured that they had no part nor lot in the Church on earth, and could have no hope of being admitted into the Church in heaven ! GROTIUS had said towards the close of his great work—that he would now shew in a few words to Christians, of whatever nation or sect, what use they should make of the truths which had been established : and this truly liberal and catholic recognition of true Christianity wherever it exists is immediately followed up by a note breathing the unchangeable spirit of Popery. “ C’est une erreur de croire qu’il y ait *d’autres vrais Chrétiens* ni d’autres domestiques de la foi, que les fidèles *qui sont dans le sein de l’Eglise Catholique* ; ceux qui s’en sont séparés, ceux qui forment ces sectes, qui toutes divisées entre elles, ne s’accordent que pour s’élever contre l’Eglise Romaine, *la seule véritable*,—tous ceux-là ne sont point enfants de l’Eglise : comme ils ne reconnaissent point celle-ci pour *leur Mère sur la terre, ils ne doivent point espérer d’avoir Dieu pour Père dans le ciel*. L’Eglise est l’Arche hors laquelle *il n’y a point de salut* !” We had thought that all true Christians belong to the true Church here, and might hope for admission into the Church above ; but no ; the Christianity of Bacon and Boyle is admitted, nevertheless they were Protestants, and as Protestants they must be excluded. And yet occasionally we discover some traces of a natural relenting—some indications of a certain degree of indecision. They are once called “ *nos frères séparés* ;” and the definition of the Church is sometimes made wide enough to embrace all in every place who profess to believe in Jesus Christ, and who observe the ordinances of his house.

We cannot of course attempt, within our assigned limits, to offer a detailed criticism on the various treatises, extending, as we are told, to somewhere about 150 octavo volumes, which are comprised in sixteen folios, closely printed in double columns ; but, on a general survey of their contents, we have collected a

few *notabilia* which may serve to illustrate at once the general plan of the work, and the method in which it is executed.

The selections from the writings of TERTULLIAN, which form the first article in the series, are sufficient to indicate the two-fold object which the editor has kept steadily in view throughout—his one object being the defence of Christianity in general, he has given Tertullian’s APOLOGY against the Gentiles, and his other object being the defence of Catholicism in particular, he has added Tertullian’s Treatise “*De Præscriptionibus Hæreticorum.*” This “unique argument des Préscriptions,” is said to be vastly effectual, and it certainly is *very convenient*: it is described as “a peremptory exception which the defendant is entitled to take against the assailant, and by which the latter is non-suited, owing to the absence of a title to plead, without entering at all into the consideration of his reasons or his method.” And with this formidable weapon Tertullian is said to have vanquished all the sects that were hostile to the Church, “*without refuting any of their arguments—without even examining any of their doctrines.*” Why then did Tertullian publish his Apology? why did he enter on a formal refutation of the errors of Marcion? why did he argue and redargue as if everything depended on the strength of his proofs? and why do his Popish Translators reproduce his arguments in defence of Christianity at the present day? Surely if *Prescription* had already taken place while he lived, and were sufficient of itself to bar all pleas whether of infidels or of heretics, it must have been confirmed by the lapse of 1600 years; and yet even the Church of Rome will not leave the cause to rest upon it; she eagerly lays hold of every subsidiary prop which reason may furnish, and does not disdain even to accept the aid of Leland, and Chalmers, and Keith.

We gladly accept the version of Origen’s reply to Celsus, and the two great works of Eusebius—the latter being still a desideratum in our own language. The treatise selected from the writings of Augustine is too brief to afford an adequate representation of the apologetics of the author of “*The City of God.*” In these cases the rule of translating the entire treatise has been adhered to, but we are now introduced to a class of writings which are presented only in fragments, and these fragments are selected and arranged without any intelligible principle other than the mere taste of the translator. Thus, after a long disquisition, entitled, “*The Christianity of Montaigne,*” in which the philosophical sceptic is declared to have been a sound believer and a true Catholic, nay, all but inspired, if we can believe his enthusiastic panegyrist, who does not scruple to say, “*L’Esprit de Dieu semblait dicter, et Montaigne tenir la plume,*” we are presented with a long series of extracts from the Natural Theo-

logy of Raymond de Sebonde, accompanied with a corresponding series of extracts from Montaigne's Essays, and these are strung together without any discernible principle of connexion.

Next in order comes the immortal BACON ; and we are gratified to find that, although not a Catholic, he is recognised as a Christian, while his great merits as the Father of Inductive Science are frankly acknowledged. In a preliminary discourse, containing some interesting literary notices illustrative of the opinions which have been entertained of the Baconian philosophy on the Continent, and especially in France, the translator confesses, that, in common with many writers of the Romish Church, he entertained a very natural prejudice against Bacon on account of the encomiums which had been pronounced upon him by the Encyclopædists and other enemies of Christianity ; but adds, that this prejudice was entirely dissipated by a careful study of his writings, and gave place to a sentiment of profound admiration, not only of his genius, but of his piety. It is not a little strange that, when Romish writers abroad are beginning to appreciate the religious spirit of Bacon, some liberals in our own country have not scrupled to hint at the Atheistic tendency of his system, and have even had the effrontery to affirm, that his professed belief in God was a necessary expedient for retaining his Chancellorship !* The revolting imputations of Atkinson and Martineau are similar to those which were long since broached by the author of the Analysis of Bacon's Philosophy, published in 1755, by which he was for the most part known in France : and they are answered by anticipation in this preliminary discourse.

Thus far we are indebted to our French neighbours for the vindication of our illustrious countryman : but we cannot approve of the manner in which they have exhibited his views by means of *garbled extracts*, nor of the use which they have sometimes made of his remarks on disputed points of doctrine. Thus, we are told that Bacon was a Protestant, but that in his confession of faith there is nothing that might not be assented to by a member of the Romish Church. This *might* have been perfectly true ; for the Romish Church having added the creed of Pope Pius to the articles of the earlier creeds, a Protestant who *ex animo* believes in the latter, might possibly construct a confession from which a Roman Catholic need not dissent : but we greatly doubt whether a staunch Romanist could, consistently with his belief in the decisions of the Council of Trent, subscribe the noble testimony of Bacon, when he says, "that the Church hath no power over the Scriptures, to teach or command any

* "Letters on the Laws of Man's Nature and Development," by H. G. Atkinson, Esq., and Harriet Martineau. London, 1851. Pp. 174, 182, 220, 265.

thing contrary to the written Word, but is as the ark wherein the tables of the first testament were kept and preserved; that is to say, the Church hath only the custody and delivery over of the Scriptures committed unto the same; together with the interpretation of them, but *such only as is conceived from themselves.*" We are told again, that Bacon always speaks respectfully of the Pope: that if he opposed the temporal power of the Romish See, he did so only as the defenders of the Gallican liberties have done; and that he often praised the writings of the scholastic divines. Let Bacon speak for himself.* "It was great blasphemy, when the devil said, '*I will ascend and be like the Highest;*' but it is greater blasphemy to personate God, and bring him in saying, '*I will descend and be like the prince of darkness.*'† And what is it better to make the cause of religion descend to the cruel and miserable actions of murdering princes, butchery of people, and subversion of states and governments. Surely this is to bring down the Holy Ghost, instead of the likeness of a dove, in the shape of a vulture or raven; and to set, out of the bark of a Christian Church, a flag of a bark of pirates and assassins. Therefore it is most necessary that the Church by doctrine and decree, princes by their sword, and all learnings, both christian and moral, as by their mercury rod, do damn and send to hell for ever those facts and opinions tending to the support of the same, as hath been already in good part done." In another place,‡ he speaks of the Reformation in these terms: "The purity of Religion, which is a benefit inestimable, and was in the time of all former princes, until the days of her Majesty's father of famous memory, unheard of. Out of which purity of religion have since ensued, beside the principal effect of the true knowledge and worship of God, three points of great consequence to the civil state. One, the stay of a mighty treasure within the realm, which in foretimes was drawn forth to Rome. Another, the dispersion and distribution of those revenues, amounting to a third part of the land of the realm, and that of the goodliest and the richest sort, which heretofore was unprofitably spent in monasteries, into such hands as by whom the realm receiveth, at this day, service and strength, and many great houses have been set up and augmented. The third, the managing and enfranchising of the regal dignity from the recognition of a *foreign superior!*" And in answer to the favourite argument of Papists founded on the existence of sects and divisions in the Protestant Church, he says, "that the Church of God hath been in all ages subject to contentions and schisms: the tares were not sown but where the wheat was sown

* Bacon's Works, II. 487.

† Ibid. II. 260.

‡ Ibid. III. 54, 59.

before. Our Saviour Christ delivered it for an ill note to have outward peace." "And reason teacheth us, that *in ignorance and implied belief it is easy to agree, as colours agree in the dark*; or if any country decline into Atheism, the controversies wax dainty, because men do think religion scarce worth the falling out for; so as it is *weak divinity to account controversies an ill sign in the Church*." Bacon's Protestantism can scarcely be questioned after reading these explicit testimonies: but by a peculiar sort of management, which has often been resorted to by Popish controversialists, his writings may be garbled, and the reader may be misled by partial quotations. We have some amusing instances of this in the compilation of M. Emery. He translates a large portion of "The Characters of a believing Christian, in paradoxes and seeming contradictions:"* but on comparing the translation with the original, we find that the first *four* paragraphs are entirely omitted; that the fifth is in one important respect mistranslated; for Bacon's words, "He believes God accepts him in these services wherein he is able to find many faults," are rendered thus—"il croit que des actions où Dieu peut lui reprocher bien des fautes, *servent à sa justification*;"†—that the *sixth* is added with some alterations to the fifth; that the *seventh* is abbreviated; that the *eleventh* and *thirteenth* are omitted—the latter for this good reason apparently, that it condemns the worship of angels; and this is only a specimen of the mode in which several works are given which are described on the general title-page as "reproduites INTEGRALEMENT, non par extraits." Bacon's "Advertisement touching the Controversies of the Church of England," is given only in part, and that too in detached fragments: and his noble introduction, in which he expressly contrasts the controversies which Protestants have waged among themselves, with the more vital questions between them and the Church of Rome, is entirely suppressed.

In connexion with the illustrious BACON, we cannot refrain from referring to the treatment which another of our most distinguished countrymen has received at the hand of the editor and his associates—we mean the truly excellent and amiable ROBERT BOYLE. Of all his admirable treatises one only is given in this voluminous collection, viz., his "Dissertation on the profound reverence which is due to God;" and while his enlightened zeal for the cause of revealed religion is explicitly acknowledged, the truly Catholic spirit which prompted him to found the noble Lectureship which bears his name, and which dictated the terms of his bequest, is so ill appreciated by his Romish commentators, that they affect to find in it a proof of

* Bacon, II. 494. *Démonstrations Evangél.*, II. 712, 789.

† *Ibid.*, II. 500. *Démonstrations Evangél.*, II. 713, 902.

the inherent weakness of Protestantism, or at least of his want of confidence in its stability. For *several times*, in different parts of the work, we have the same miserably low-minded estimate of the motives which induced that truly noble man to found a lectureship on “the truths of *the Christian religion in general*, which should *not* enter on the discussion of those controversies by which Christians were divided among themselves.” Thus in the *fourth* volume of the “*Démonstrations Évangéliques*,” after quoting the terms of the bequest, as providing “pour un certain nombre de sermons qu’on doit prêcher toutes les années sur les vérités de la Religion Chrétienne en général, sans entrer dans les disputes particulières qui divisent les Chrétiens,” the writer adds, “*il sentait que la secte qu’il professait ne gagnerait rien à cette discussion.*” And again in the *sixth* volume, “on aperçoit facilement, d’après la disposition qu’on vient de lire, que le testateur, *intimement convaincu de la foiblesse des sectes Protestantes*, craignit de les détruire toutes, et la sienne en particulier, en les mettant aux prises, et jugea à propos, pour éviter ce danger, de s’attacher à la défense du Christianisme en général.” (!) Surely it might have occurred to the mind of any candid Catholic that the defence of Christianity is one thing, and the defence of any particular denomination of Christians another; and that to such a lofty and comprehensive mind as that of Robert Boyle it might seem to be expedient to unite all the churches of Christendom in defence of their common cause, by excluding from his lectureship everything that might tend to revive unnecessarily the points of comparatively minor moment on which they differed among themselves. And, strange to say, this more liberal view of the matter is given by the French translator of Samuel Clarke’s *Demonstration*, which is inserted in the *fifth* volume of the “*Démonstrations* ;” for, notwithstanding their common connexion with the Romish Church, and the vigilant editorial supervision of Abbé Migne, the translators are not always found to be of the same mind. After narrating the terms of the bequest, it is added, “il fit plus, car il prit soin de marquer en général le sujet sur lequel il entendait que cette lecture roulât. Il interdit à ceux qui entreraient dans la carrière qu’il ouvrait la controverse contre les sectes particulières qui partagent le Christianisme. Il y a tout lieu de croire que les sages réflexions que cet habile homme avait faites sur la manie de prédicateurs qui, dans presque tous les pays, s’acharnent sur des disputes de néant, pendant qu’ils négligent les matières les plus importantes ; il y a, dis-je, tout lieu de croire que ces réflexions ont produit la cause de son codicille qui restreint la lecture en question aux vérités générales et aux principes de la foi.” . . . “Il ordonna en un mot que cette

lecture fût toute employée à mettre en évidence les preuves de la vérité de la Religion Chrétienne, et à les défendre contre les attaques des infidèles, notoirement tels, comme sont les Athées, les Déistes, les Païens, les Juifs, et les Mahométans, *sans toucher aux controverses* que les diverses Sociétés de Chrétiens ont les unes avec les autres." The plan of the "Démonstrations Evangéliques" proceeds on a different principle; it attempts to combine the defence of Christianity with the vindication of Popery, and is as much directed against the Protestant as against the infidel cause. We think that M. Abbé Migne had done well to imitate the example of Robert Boyle, and that, in doing so, he would have shewn more of a truly Catholic spirit, and less of a narrow sectarian bigotry.

On the whole, this collection of "Démonstrations Evangéliques," although far from being either complete or in all respects unexceptionable, is a valuable contribution to sacred literature. It offers, at a cheap rate, and in a commodious form, a French version of some standard works; and did it contain nothing else than the massive treatises of Origen, Eusebius, and Huet, it might be accepted with gratitude by every student of Apologetics. But it contains much more. It places before the English reader many treatises well known on the Continent, but hitherto almost inaccessible to ourselves, which possess a high value, both in a literary and theological point of view: such as, the comprehensive work of Statler on the "Certainty of the Christian Religion;" the "Historic Proof," by Beauzée; the "Philosophy of Religion," by the Abbé Para du Phanjhas; and the Poems of Cardinal de Bernis and of Cardinal Polignac, ("La Religion Vengée" and "Anti-Lucretius,") and some others, which have hitherto been comparatively little known to the English reader. And we cannot help thinking that it may be salutary to our Continental neighbours themselves to be made acquainted with some of the standard works of our great English apologists: and that the translations of such treatises as those of Clarke, Lesley, Stanhope, West, Bentley, Littleton, Warburton, Chalmers, and Keith, may lead some at least of the more candid Churchmen of Rome to concur with the distinguished Abbé Guenée in saying, "Rendons justice à la nation Anglaise, quoique maintenant notre ennemie. Il est glorieux pour elle que la religion Chrétienne y trouve des défenseurs si zélés parmi ceux qui y occupent les premiers rangs dans la littérature, et les plus hautes places dans l'Etat. Nous accusons souvent l'Angleterre comme la source de l'incrédulité parmi nous: et de son côté, elle nous rend bien ce reproche; mais, *il faut l'avouer*, si l'on ne saurait nier que la religion n'ait été souvent et vivement attaquée par quelques écrivains de cette nation, elle *n'a guère été nulle part plus sagement défendue.*"

- ART. III.—1. *Royalty and Republicanism in Italy.* By JOSEPH MAZZINI. London, 1850.
 2. *Italy in 1848.* By MARIOTTI. London, 1851.
 3. *Taschenbuch der Neuesten Geschichte.* Von ROBT. PRUTZ. Dessau, 1851.
 4. *Germany in 1850; its Courts, Camps, and People.* By the Baroness BLAZE DE BURY. London, 1850.

PROBABLY since the fall of the Roman Empire the world has never seen a year so eventful and distracting as 1848. It seemed like a century compressed into a lustrum. Never was there a year so distinguished beyond all previous example by the magnitude and the multiplicity of its political changes—by the violence of the shock which it gave to the framework of European society—by the oscillations of opinion and success between the two great parties in the Continental struggle. Never was there a year so pregnant with instruction and with warning—so rich in all the materials of wisdom both for sovereign and for people—so crowded with wrecks and ruins, with the ruins of ancient grandeur, and the wrecks of glorious anticipations—so filled with splendid promises and paltry realizations, with hopes brilliant and fantastic as fairy-land, with disappointments dismal and bitter as the grave. Thrones, which but yesterday had seemed based upon the everlasting hills, shattered in a day; sovereigns, whose wisdom had become a proverb, and sovereigns whose imbecility had been notorious, alike flying from their capitals, and abdicating without a natural murmur or a gallant struggle; rulers, who had long been the embodiment of obstinate resistance to all popular demands, vying with each other in the promptitude and the extent of their concessions; statesmen of the longest experience, the deepest insight, the acutest talent—statesmen like Metternich and Guizot—baffled, beaten, and chased away, and reaching their foreign banishment only to turn and gaze with a melancholy and bewildered air on the *écroulement* of schemes and systems of policy, the construction of which had been the labour of a lifetime; eminent men sinking into obscurity, and going out like snuff; obscure men rising at one bound into eminence and power; ambitious men finding the objects of their wildest hopes suddenly placed within their grasp; Utopian dreamers staggered and intoxicated by seeing their most gorgeous visions on the point of realization; patriots beholding the sudden and miraculous advent of that liberty which they had prayed for, fought for, suffered for, through years of imprisonment, poverty, and exile; nations, which had

long pined in darkness, dazzled and bewildered by the blaze of instantaneous light; the powerful smitten with impotence; the peasant and the bondsman endowed with freedom and unresisted might; the first last and the last first;—such were the strange phenomena of that marvellous era, which took away the breath of the beholder, which the journalist was unable to keep pace with, and “which panting Time toiled after in vain.”

The year opened with apparent tranquillity. In two quarters only of Europe had there been any indications of the coming earthquake; and to both of these the eyes of all friends of freedom were turned with hopeful interest and earnest sympathy. The first dawn of a new day had arisen in a country where least of all it could have been looked for—in Rome. There, in a state long renowned for the most corrupt, imbecile, mischievous administration of the western world, a new Pope, in the prime of life, full of respect for his sacred office, and deeply impressed with the solemn responsibilities of his high position, set himself with serious purpose and a single mind, though with limited views and inadequate capacities, to the task of cleansing those Augean stables from the accumulated filth of centuries. He commenced reform—where reform, though most rare, is always the most safe—from above; he purified the grosser parts of the old administrative system; he shewed an active determination to put down all abuse, and to give his people the benefit of a really honest government; he ventured on the bold innovation, in itself a mighty boon and a strange progress, of appointing laymen to offices of state; and, finally, he convoked a representative assembly, and gave the Romans a constitution—the first they had seen since the days of Rienzi. His people were, as might have been anticipated, warmly grateful for the gifts, and enthusiastically attached to the person, of their excellent Pontiff; all Europe looked on with delight; Pio Nono was the hero of the day; and everything seemed so safe, so wise, so happy, that we felt justified in hoping that a new day had really dawned upon the ancient capital of the world.

Sicily, too, had about the same time entered upon a struggle to recover some portion of her promised freedom and her stolen rights. Her wrongs had been so flagrant, so manifold, so monstrous; the despotism under which she groaned was at once so incapable, so mean, so low, so brutal; her condition was so wretched, and her capabilities so vast, that the sympathies of the world went with her in her struggle with her false and bad oppressor. All ranks of her citizens were unanimous in their resolution of resistance; even the priests, elsewhere the ready tools of tyranny, here fought on the side of the people, and blessed the arms and banners of the reformers; and what was still more

remarkable, and of more hopeful augury, all classes seemed to put mutual jealousies aside, and to be actuated by the same spirit of sincere, self-denying, self-sacrificing patriotism. Their demands were moderate but firm, and so reasonable, that the mere fact of such demands having to be made, was an indelible disgrace to Naples. So far, too, their course had been singularly cautious; they had committed no blunder, they had displayed no sanguinary passion, and no violent excitement, and it was impossible not to hope everything from a contest so wisely conducted, and so unimpeachably just. At length, on the 8th of February, the Sicilians having been everywhere victorious, the preliminaries of an arrangement with the king of Naples were agreed to, on the basis of the constitution of 1812. So far all went well.

In the meantime, excited or warned by the example of the Pope, and the enthusiasm of the Romans, other Italian princes began to move in the path of improvement. The King of Sardinia, the Grand Duke of Tuscany, and the King of Naples, promised a constitution to their subjects, and actually took measures for carrying these promises into effect. The excitement soon reached Lombardy; popular movements took place at Milan, but were repressed by the Austrian Government with even more than wonted promptitude and severity. Hungary had for some years been making great efforts towards national improvement, and some relaxation of the old feudal privileges, as well as towards a recovery of their old constitutional liberties; but Austria had steadily repressed all such exertions; and a long course of perfidy and oppression had at length so exasperated the Hungarians, and united all parties among them against the common enemy, that it became evident that the contest was approaching to an open rupture.

Such was the position of affairs when the French Revolution of February came like an earthquake, astounding nations, "and, with fear of change, perplexing monarchs." The events which ensued are still fresh in the memory of all men. The democratic party throughout the whole of central Europe burned to follow the example of a movement the success of which had been so signal and so prompt. The effect was electric; but not everywhere, nor altogether, wholesome. The friends of freedom felt that the time was come to assert their cause, and to claim, without fear of a refusal, the rights so long withheld; while those nations which had already taken some steps towards the attainment of free institutions, and had hitherto deemed their progress rapid and brilliant beyond their most sanguine anticipations, now began to regard it as tardy, *jog-trot*, and inadequate. They looked askance on constitutional monarchy, and began to sigh

for a republic. The arrangement between the Sicilians and their sovereign, which had been all but concluded, was broken off, in consequence of an augmentation of the popular demands ; while Tuscany, Sardinia, and Rome began to think their liberal rulers scarce liberal enough. At Berlin, where some tardy steps had at length been taken towards the advent of a constitutional government, the people were anxious to get on faster than the fears or the opinions of the monarch could go with them ; an insurrection broke out, and a sanguinary contest of two days' duration desolated the city, and terminated in the scarcely veiled defeat of the crown. This was on the 18th of March. On the 6th, an insurrection took place at Munich, which resulted in the exaction of extensive reforms, and was shortly afterwards followed by the abdication of the king. On the 14th, a revolution broke out at Vienna, which ended in the flight of Prince Metternich, and the proclamation of a representative government. On the 19th the Austrians were driven out of Milan, and a provisional government was established in Lombardy. Thus, in a month from the outbreak of the French Revolution, the whole of central Europe was revolutionized.

Such is a summary of these astounding events, the like of which were assuredly never crowded into so brief a portion of time. The popular party—the friends of free institutions and constitutional rule—everywhere aroused and everywhere triumphant, achieving, with an ease and rapidity which partook of the miraculous, the most decisive victories over the oldest, sternest, rustiest administrative systems of Europe,—were everywhere followed by the sympathy, the admiration, and the prayers of all lovers of humanity, and everywhere strong with the strength which such sympathy must always give.

Where now are all those bright prospects vanished?—which of all those mighty changes have become permanent?—what has been the enduring fruit of all these brilliant victories?—where now are to be found all those fresh, young, sanguine constitutions? With scarcely an exception, everything has fallen back into its old condition. In nearly every state the old demon of despotism has returned, bringing with it worse devils than itself. Hungary and Hesse are crushed ; Bavaria has been degraded into the brutal tool of a more brutal tyrant ; the Prussian people are sullen, desponding, and disarmed, and the Prussian Government sunk into a terrible abyss of degradation ; Austria has a new emperor, more insolently despotic than any of his predecessors for many a long year ; and throughout Germany constitutional liberty has been effectually trampled out. In Italy, Venice and Lombardy have been reconquered, and are now experiencing the *væ victis* ; Tuscany is worse, because more Aus-

trian than before, and alarmed at the peril she has incurred ; the small duchies are as bad as ever—they could not be worse ; the Pope, terrified out of his benevolence and his patriotism, has been restored by foreign arms, and the old ecclesiastical abominations are reinstated in their old supremacy ; while Naples and Sicily are again prostrate at the feet of the most imbecile and brutal of the incurable race of Bourbons. Two short years have passed away since Europe presented to the lover of liberty and human progress the most smiling aspect she had ever worn ;—and in this brief space of time, an inexorable destiny has gathered together all the far reaching anticipations, all the noble prospects, all the rapid conquests, all the rich achievements of that memorable era, and covered them over with these two narrow words—*Hic jacet.*

Even patriots like ourselves, who stood aloof from actual participation in the strife, viewing its vicissitudes with the simple interest of spectators, and who had no personal concern in the issue, might well be disheartened at such tremendous reverses and such extreme reaction. The cup of hope was probably never filled so full, or approached so near to the lips that were *not* to drink it. A victory so nearly gained, and so entirely lost—success so brilliant and complete, followed by failure so disastrous and so crushing—has scarcely ever been recorded in history. But we are too firm believers in human progress to imagine that even in this case the defeat has been as total and thorough as it appears ; nay, we are convinced that in the midst of apparent retrogression there has been actual advance ; that in spite of all appearances to the contrary, the years 1848, 1849, 1850, have not been lost to the onward march of humanity ; that the cause of freedom—though often fought so ill, though stained with some excesses, though tarnished by so many follies, though overshadowed for the moment by so dark and thick a cloud—has yet on the whole gained by the struggle, and grown stronger notwithstanding its manifest defeat ; and instead, therefore, of lamenting an irrevocable past, or endeavouring to allot to the various parties in the *mêlée* their respective shares in the production of the common failure, we shall do better service by attempting to extract from the confusion of events the *net results*, the residual gain, of these unexampled years.

The progress of humanity is never regular. Freedom and civilisation advance, externally at least, by fitful and spasmodic springs. Their march has been compared to that of the flood-tide, where every wave retires, yet the whole mass of waters moves incessantly and irresistibly onwards. But the similitude is inaccurate, inasmuch as in human progress there is no constant and steady movement, and no inevitable ebb. A more

correct likeness may be found in the wave which is slowly but perpetually undermining a vast cliff, covered with buildings and crowded with men, containing monuments which have endured for ages, and results of energetic industry which look forward to ages more. Everything bears the impress of stability, every individual has the conviction of immutable security, save the few who have descended to the base of the cliff and perceived the fearful havoc wrought by the ceaseless and silent toil of their unseen destroyer. No warning sound, no partial sinking of the earth gives timely intimation of the catastrophe which is preparing;—till at length, when the work is complete, and the foundations wholly washed away, an accident, a nothing, a trivial shake, a rolling of distant thunder, gives the needed jar, and the whole structure, with its mighty edifices, its ancient bulwarks, its modern creations, its vivid, teeming, multitudinous life, is engulfed in the destroying sea.

A more exact one still is to be found in the old arithmetical puzzle of our childhood—the snail which climbed up three feet every day, and slipped down two feet every night. The year 1848 was the climbing day: 1849 and 1850 were the backsliding night. Now, in 1851, we can estimate the two together, and calculate roughly how much has on the whole been gained, how much further forward we are than we were in 1847. In our last Number we spoke of France: her drama is not yet played out, and its issue and residual phenomenon no man can foresee. At present we shall confine our attention to Germany and Italy—a sad spectacle, but, closely and rightly viewed, by no means a despairing one.

The condition of these two countries when the Revolution broke out, presented some interesting points of similarity with each other, and of contrast with France and England, which it is important to notice. In all four countries there was much suffering and much discontent; but the malcontents and the sufferers belonged to different classes in society. In England and in France the lower orders were the chief malcontents; and unquestionably, especially in the latter country, they had much to complain of, and much to endure. Difficulty of obtaining subsistence, actual and severe privation in the present, and no more hopeful prospects for the future, darkened the lot and soured the temper of hundreds of thousands of the people. The more fortunate saw little before them beyond strenuous and ceaseless toil, from early morning till late evening, from precocious childhood to premature decrepitude. The less fortunate often sought toil in vain, dug for it as for hidden treasure, and found it when obtained, uncertain and unremunerative. A class—often a very numerous class—had grown up among them, whom de-

fective social arrangements had left without any means of subsistence, beyond habitual crime and the God-send of occasional insurrections.

Nearly all these were more or less uneducated, with passions unsoftened by culture, and appetites sharpened by privation—excitable, undisciplined, and brutal. Such were always ready for any social or political convulsion—prompt to aid and aggravate it, certain to complicate and disgrace it. It is a fearful addition to the perplexities and horrors of a revolution when the mass of the nation are destitute and wretched. Germany and Italy were in a singular measure free from this element of confusion; and in so far their path was wonderfully clear and easy. In Germany the orderly, industrious, and simple habits of the peasantry; the general possession of land by the rural portion of them, especially in the Prussian provinces; the relics of the old distribution of artisans into guilds; the watchful care of the numberless bureaucratic governments to prevent the too rapid increase of this, or indeed of any class; the systematic care of Austria, especially, to keep the lower classes in a state of material comfort; the habit in some states, as Bavaria, of requiring a certificate of property as a preliminary to marriage,—had combined to prevent poverty, except in rare cases, from degenerating into destitution, so that there was, generally speaking, little physical distress or suffering among the mass. The diffusion of elementary education too, (such as it was, for we are no amateurs of the Continental system in such matters,) prevented the existence of such utterly savage and ignorant masses as were to be met with in France, and unhappily in England also. The same exemption from squalid misery which in Germany was due to care, system, and culture, was bestowed upon the Italians by their genial climate, their fertile soil, and their temperate and frugal habits, so that though there was often poverty—though poverty, and, as we in England should regard it, poverty of the extremest kind was frequent, and in Rome and Naples almost universal—still, that actual want of the bread of to-day, and that anxiety for the bread of to-morrow, which make men ready for any violence or commotion, were in the greater part of Italy comparatively rare. In Tuscany and Lombardy, more especially, the utterly destitute and starving were a class quite unknown.

In both countries, therefore, the discontented and aspiring class—the makers of Revolutions—were the educated and the well-to-do; men whose moral, not whose material, wants were starved and denied by the existing system; men of the middle ranks, who found their free action impeded at every step, whose noblest instincts were relentlessly crushed, whose intellectual

cravings were famished by the censorship, and whose hungry and avid minds were compelled daily to sit down to a meal of miserable and unrelished pottage; men of the upper classes, whose ambition was cramped into the pettiest sphere, and forced into the narrowest channels, to whom every career worthy of their energies and their patriotism was despotically closed, who were compelled to waste their life and fritter away their powers in the insipid pleasures of a spiritless society, in metaphysical speculation, or antiquarian research. Hence, with all its faults, the revolution in Germany and in Italy had a far nobler origin, and a loftier character than that of France; it was the revolt not of starved stomachs, but of famished souls; it was the protest of human beings against a tyranny by which the noblest attributes of humanity were affronted and suppressed; it was the recoil from a listless and unsatisfying life by men who felt that they were made for, and competent to, a worthier existence; it was a rebellion of hearts who loved their country, against a system by which that country was dishonoured, and its development impeded; it was not the work of passionate, personal, and party aims, but of men who, however wild their enthusiasm, however deplorable their blunders, still set before them a lofty purpose, and worshipped a high ideal.

The *mouvement* party (to borrow an expressive phrase from the French) is composed in different countries of characteristically different materials. The busy ex-parliamentary reformers; the radicals, who take one grievance or anomaly after another, and agitate and grumble till they have procured its abolition; who have either originated or been the means of carrying each successive measure of reform, are with us almost exclusively composed of the active and practical men of the middle classes—merchants and manufacturers, educated enough to be able to comprehend the whole bearings of the case, but distrusting theory, eschewing abstractions, and too well trained in the actual business of life to be in much danger from disproportionate enthusiasm; shopkeepers and tradesmen, not perhaps masters of the political importance or full scope of the question at issue, but quick to detect its bearing on their personal interests, bringing to its examination a strong, if a somewhat narrow, common sense, observing a due proportion between their means and their ends, and never, in the heat of contest, losing sight of the main chance;—these constitute the centre and the leaders of the movement party in England, and have imparted to all our innovations that character for distinctness of purpose, sobriety of aim, and practicality of result, which has always marked them.—In France the *mouvement* party has been composed of the politicians by profession or by taste; of the amateurs and adventurers of

public life; of journalists, who had each their pet crotchet and their special watchword, and who attained in that country a degree of personal influence which is without a parallel elsewhere; of men to whom the Republic was a passion; of men to whom it was a dream; of men to whom it opened a vista rich in visions of pillage and of pleasure. It was a vast heterogeneous congeries of all the impatient suffering, of all the fermenting discontent, of all the unchained and disreputable passions, of all the low and of all the lofty ambition of the community.—In Germany, again, the *mouvement* party was composed, in overwhelming proportion, of the *Burschenschaft*—of students and professors, of young dreamers and their dreaming guides—men qualified beyond all others to conceive and describe a glorious Utopia, but disqualified beyond all others to embody it in actual life. It is curious to observe how everywhere throughout the German revolutions, the collegians were prominent. The students led the struggle at Berlin; the Academic Legion was for some time the ruling body at Vienna; the Frankfort Assembly was, as *The Times* truly characterized it, “an anarchy of professors.” We do not mean to say, that the revolutionary movement was not joined and sympathized with by numbers in all ranks and classes—though it is important to observe, that from the peculiar system of educational training in Germany, all these had gone through the same discipline, and been subject to the same influences; but the tone of the movement was given, its course directed, and its limit decided, by learned men, whom a life of university seclusion and theoretic studies had precluded from the possession of all practical experience, and by young men fresh from the scenes and the heroes of classic times, and glowing with that wild enthusiasm, that passionate but unchastened patriotism, those visions of an earthly Eden and a golden age, and that unreasoning devotion to everything that bears the name or usurps the semblance of liberty, which at their age it would be grievous *not* to find. Finally, in Italy, the leaders of the new Reformation were men of as pure and lofty an enthusiasm, but of far finer capacities, and of a sterner and firmer make of mind, but equally untrained in political administration, and with a task beyond their means;—men, not indeed finished statesmen or accurate philosophers, because debarred from that *education of action* which alone can complete the training of the statesman and test the principles of the thinker,—but of the materials out of which the noblest statesmen and the profoundest philosophers are made;—many of them

“ Of the canvass which men use
To make storm stay-sails ;”

many of them exhibiting powers for government and war which need only a fairer field to obtain their full appreciation.

It is natural that political changes emanating from bodies so variously constituted as these should be widely different in their nature and objects, and be crowned with very various degrees of success. In Italy and Germany the patriots had one almost insuperable difficulty to contend with. In both countries the fatal system of bureaucracy had paralyzed the energies and dwarfed the political capacities of the people. In Germany they had been ruled like children—in Italy like victims or like vanquished slaves. But in both countries the whole province of administration, even in its lowest branches, had been confided to a separate class, set apart and trained to that profession, and directed and controlled from head-quarters. The people could do nothing except by official permission and under official supervision; long disuse produced inevitable disqualification; long inaction inevitable incapacity;—till when the crisis arrived, it appeared that the old established functionaries were the only men capable of practical action. When the power was suddenly thrown into the hands of the inexperienced classes, none could be found among them—in Germany at least—competent to use it. In the south of Italy the old functionaries had always been so abominably bad, that even the most incompetent and fresh of the new aspirants could not possibly make worse administrators. But in Germany the fact was as unquestionable as humiliating; and one of the most important lessons inculcated by the time was the utter inadequacy of the best contrived system of national or college education for supplying political training. The lower portion of the middle classes in Germany receive a far more complete and careful education in literary and scientific matters than the same portion with us; and in the instruction of the working-classes there is (or was lately) no comparison; yet our municipal councils, our vestry meetings, our boards of guardians, our numberless voluntary associations, form normal schools for statesmen and administrators to which the Continent presents no analogies, and for which unhappily it can furnish no substitutes, and the want of which was most deeply felt in 1848. It may be safely conceded to the advocates of bureaucracy and centralization in this country, that we pay dearly for our love of self-government in daily extravagance and incessant blunders; but it must also be allowed, after recent events, that the costly experience and capacity thus acquired is cheap at any price.

In speaking, however, thus severely of the incapacity displayed by the Germans for the construction and management of constitutional forms of government, we are bound to particular-

ize one remarkable exception—an exception so signal and instructive as to inspire the most sanguine hopes for the success of the Germans in this new career, when the next opportunity shall be afforded them of shewing how far they have profited by the experience of the past. We allude to the small state of Hesse-Cassel, whose admirable struggle and sad catastrophe well deserve a brief digression. In general, we are too well aware, our countrymen take little interest in the internal concerns of foreign states; but the case of Hesse is so peculiar, so scandalous, and presents so many analogies with the most important and glorious struggles in our own history, that it will need only a short statement of what her constitution was, how it has been crushed, and how it has been defended, to excite in English bosoms the warmest admiration for the unfortunate vanquished, and the sincerest admiration for their firmness, forbearance, noble disinterestedness, and unswerving reverence for law.

The Constitution of Hesse-Cassel was granted on the 5th of January 1831, by the father of the present Elector. Its date shews its origin. The French Revolution of 1830 had awakened in the mind of Frederick-William some fears for the stability of his own throne, and he proffered his subjects a free constitution. The terms were soon agreed upon; and considering the period of excitement in which they originated, they are strangely moderate and fair, and shew, on the part of the Hessians, a far more real conception of the essence and the guarantees of freedom than is common among Continental nations. The following are a few of the most important provisions:

“ The representatives are not bound by instructions from their electors, but give their vote in accordance with their duties towards their Sovereign and their fellow-citizens, according to their own judgment, as they hope to answer it before God and their conscience.

“ Each representative must take the following oath :—‘ I swear to hold sacred the Constitution, and always to have at heart, in my votes and motions in this Assembly, both the welfare of my Sovereign and that of my fatherland, according to my own conviction, and without allowing myself to be influenced by any other consideration. So help me God.’

“ The representatives are elected to act as such for three years. After three years, new elections take place, without any decree to that effect requiring to be issued on the part of the Government. The same persons may be re-elected.

“ The Elector calls the representatives together as often as he may think it necessary for the settlement of any important or pressing matters referring to the affairs of the State. They must, however, be called together at least every three years.

“ The Elector has the right to adjourn or dissolve the Assembly,

but the adjournment is not to last above three months, and in case of a dissolution, the order for new elections has to be issued at the same time.

“ All orders and regulations referring to the maintenance or carrying out of any of the existing laws shall emanate from the Government alone. The Government can also, during the time the Assembly is not sitting, on the request of the respective heads of the ministerial departments, and with the co-operation of the permanent committee, pass such exceptional measures as the already existing laws may not provide for, but which they may consider necessary for the security of the State, or for the maintenance of the public peace. After such measures have been passed, the representatives shall, on the requisition of their committee, be called together without delay, in order that their sanction to such measures may be obtained.

“ Previous to a dissolution or adjournment of the Assembly taking place, the members have to elect a committee of three or five of their own number, not only to watch the carrying out of the measures or laws passed by the Assembly, and take care of its interest, but also to act in accordance with the instructions they may have received from the Assembly, and the provisions of the Constitution. The majority of this committee shall neither consist of officers of Government nor of those holding appointments at Court.

“ The head of each ministerial department has to countersign any decree or regulation referring to his department issued by the Elector, and is held personally responsible for the contents being strictly in accordance with the provisions of the Constitution and the laws of the country. As regards any decrees or regulations which have reference to more than one or the whole of the Government departments, they have to be countersigned, jointly, by the respective heads of each department, each being held personally responsible for his own department.

“ All Government officers shall be held responsible for their acts, and any one guilty of a violation of the Constitution, *particularly by carrying out any decree not issued in a strictly constitutional form*, shall be proceeded against before the competent legal authorities. The representatives have the right, and are bound to proceed before the High Court of Appeal, against any of the heads of the Government departments who may be guilty of a violation of the Constitution. Should the accused be found guilty he is dismissed, and can no longer hold office.

“ Beginning with the year 1831, *no direct or indirect taxes can be levied, either in war or peace, without the sanction of the Assembly*. For this purpose an estimate, stating the probable income and cost of the Government, with the greatest possible accuracy and completeness, must be laid before the Assembly. The necessity or desirableness of the different estimates must be shewn; *the different departments of the Government are bound to furnish the Assembly with any information in their possession which may be required*.

“ All Government decrees relating to the collection of taxes shall

state particularly that such taxes are levied with the consent of the Assembly, without which it shall not be lawful for any collector to collect such taxes, nor are the people bound to pay them."

To this Constitution the Hessian representatives, the civil and military functionaries, and the Elector himself, solemnly swore allegiance. So sensible, so moderate, so little democratic was it, though framed at a time when most extravagant ideas of freedom were fermenting throughout Europe—so scrupulously did it confine itself to those two essential provisions, without which all political freedom is a mockery, (viz., establishing the supremacy of law, and securing to the representatives of the people the sole power of taxation,) that it caused considerable disappointment to the extreme party. Moderate as it was, however, the ink was scarcely dry with which the Elector had signed his name to it, before he began a series of covert stratagems to undermine the liberties which he had sworn to maintain inviolate; and, with the help of the same Hasenflug, who has since earned such an unenviable notoriety as prime minister in one country, and as prisoner, on a charge of forgery, in another—he had nearly succeeded in reducing the constitution to a mere name, when the Revolution of February broke out in Paris, and frightened him back into decency and law. As cowardly as he was false, he immediately issued a proclamation announcing his intention to govern in future in a really legal and popular spirit, and gave a ready sanction to a number of salutary reforms. The result was that Hesse-Cassel remained perfectly tranquil during the revolutionary furor which deluged and desolated the rest of Germany in 1848 and 1849; and with a forbearance and magnanimity which has met with a black requital, the people refrained from availing themselves of the power which that season of excitement put into their hands, to extort from their perfidious prince any additional securities, or more extended rights.

But the Elector was not a man to whom forbearance could be safely shewn. He belonged to that class of sovereigns who have been described as "the opprobria of the southern thrones of Europe—men false alike to the accomplices who have served them, and the opponents who have spared them—men who, in the hour of danger, concede everything, promise everything, turn their cheek to every smiter, give up to vengeance every minister of their iniquities, and await, with meek and smiling implacability, the blessed day of perjury and proscription." As soon as the prevalence of the reactionary spirit of 1850 made it safe, Hasenflug (who had been obliged to retire in 1837) reappeared in the Council-chamber, detested from old recollections, and loaded with recent infamy. He returned with the express mission of trampling down the constitution, and lost no time in

setting about his task. In direct violation of clause 144, he demanded a vote of money from the Chamber, but proposed no budget, and insolently refused all explanation of the purposes to which the money was to be applied. The Chamber did its duty, and refused the vote. Hasenflug then dissolved the Chamber, and, in violation of clause 146, issued a decree ordering payment of the unvoted taxes. The Supreme Court of Appeal pronounced the decree illegal. The people, confident in the sense and patriotism of the civil authorities, remained stubbornly and provokingly tranquil, notwithstanding many sinister attempts to goad them into some uproar which might serve as a pretext for more violent proceedings. The Elector, however, issued a proclamation, placing the whole country under martial law, and directing the press to be silenced, and the taxes to be levied by force. The Supreme Court of Appeal immediately issued a counter proclamation, pronouncing all these transactions unconstitutional and illegal, and impeaching the general officer (Bauer) who had accepted the office of carrying them out. General Bauer resigned, and the Elector and his minister fled, baffled, dishonoured, and derided.

From his place of refuge the Elector appointed a new commander-in-chief, General Haynau, with unlimited powers. It now became necessary for the Hessian army to decide upon their course. They had to decide between their country and their oath on the one side, and their habits of military obedience on the other. The officers consulted together, and then waited on the General, and informed him that he might depend upon them only so far as was consistent with the oath they had been required to give to uphold the constitution intact. He gave them the choice between obedience or throwing up their commission: They chose the latter alternative almost to a man. He then took the step, quite without a precedent in Germany, of offering commands to the non-commissioned officers: They unanimously refused to accept them. The army was thus paralyzed, the press was silenced, the journals seized, the courts suspended, but the people remained resolute and passive; they simply did nothing, and by this attitude embarrassed the Elector far more than the most active resistance could have done. The taxes were still uncollected, for the financial *employés*, pointing to clause 146, refused to collect any which had not been legally imposed. The Elector was baffled by the pure inability to find among his own subjects a sufficient number of agents, either civil or military, base and unpatriotic enough to carry out his nefarious designs. With the exception of a few among the upper classes, the resistance and the virtue were strictly *national*.

Under these circumstances he applied to Austria for assistance

to reduce his subjects to obedience ; and the Emperor, too happy to have an opportunity of interference, marched a body of Austrian and Bavarian troops into Hesse, and took military possession of the Electorate. Prussia, as usual, blustered, threatened, and gave way, leaving the unhappy Hessians to the tender mercies of an ill-disciplined and hostile soldiery.

These troops—the army of execution, as they were called—have entirely eaten up the resources of the Electorate. They were billeted on the refractory *employés*, till they either resigned or gave in their adherence to the illegal decrees of the Elector. Few have been found to do the latter. Judges of the Supreme Court had fifteen to twenty Bavarian brutes quartered on their families, with a threat of an additional number each day, if they would not resign their functions to more compliant successors. The members of the Town-council, in addition to this, were menaced with a court-martial and corporal punishment, if they would not declare (which as men of conscience it is impossible they could) that the decree of martial law was in accordance with the Constitution. Individuals of every class, rich and poor, were oppressed and extortionized in the same brutal manner, and daily subjected to all the indignities which could be offered to them by a coarse and savage soldiery, whose express duty was to make them as miserable as they could, for the sake of more promptly reducing them to submission.

Such is a brief outline of the Hessian tragedy :—such the deliberate abolition by foreign force of a constitution like our own ; —such the treatment of a people who have shewn that they knew how both to value and to use their rights, and whose conduct will lose nothing by a comparison with that of the constitutional heroes of our own country—the goodly fellowship of our political Reformers—the noble army of our civil Martyrs. Its consequences will probably be far wider and more serious than might, at first sight, seem likely to ensue from a mere piece of cruel tyranny on the part of a petty sovereign of central Europe. There exists an element of revolutionary disturbance in Germany which deserves far more attention than it has hitherto received, which is fraught with menace not only to the present order of things, but to monarchy *per se*,—a source of strength to the people, and of weakness and danger to the princes, and which no mere political reaction, no mere military oppression, can put down. The Germans are, on the whole, especially the middle classes, a sincere, loyal, virtuous, and reverential people. They are attached to all the homely and substantial excellencies of character. They love truth and honesty ; they value the decors and respectabilities of life ; and they are naturally disposed to respect, even to enthusiasm, the authority of rank and gran-

deur. But this disposition and habit of reverence has of late been rudely shaken, and is now entirely rooted out. As they look round upon their princes and rulers, they can find but few who are worthy of respect, either for capacity, truthfulness, or propriety of private character. Many of those who are placed in hereditary authority over them, are persons whom no man of sense could converse with without despising—whom no honest man could trust in the common transactions of life—whom no man of correct morals would willingly admit into his family. The secret—sometimes the notorious—history of many of their courts for the last forty years has been a tissue of oppression, duplicity, and profligacy. Putting aside the King of Hanover—of whom, wishing to say no evil, we shall of necessity say nothing at all—and the Kings of Prussia, the late as well as the present, whose perfidious conduct can find its only excuse in the supposition of impaired capacities—the present virtual rulers of Austria, Prince Schwartzemberg and the Archduchess Sophia, are persons whose private character will bear no examination, and whose scandalous chronicle is well known upon the Continent;—the old King of Bavaria made himself the disgrace and ridicule of Europe, by his open and vagabond amours;—while the Elector of Hesse-Cassel is a man whose profligacy has set at nought all the bounds of secrecy and decorum, and whose personal honour is stained, in addition, with proceedings worthy only of a low-lived sharper. Yet this is the very prince for whose pleasure a noble and high-spirited people have been subjected to military outrage, to restore whose despotic authority a free constitution like that of England has been violated and annulled; and Austria and Bavaria, sharers in his impurities, have been the chosen and willing instruments in this high-handed oppression. We cannot wonder that all this has spread an anti-regal spirit in Germany, which will one day—probably an early day—bring bitter fruits; and when we remember that it has needed all the honest benevolence of William IV., and all the spotless purity and domestic virtues of Victoria, to enable the loyalty of Englishmen to recover from the shock it received from the contrasted conduct of their predecessor, we may form some conception of the state of feeling among a people like the Germans, who, wherever they turn their eyes, can see nothing above them to love, reverence, or trust. “Spiritual wickedness in high places” has dissipated the *prestige* which should “hedge in” greatness, and hallow rank and rule; there is growing up among them a deep-rooted conviction that the royal races are incurably bad, untrustworthy, and incapable; and in the very next period of disturbance or political enthusiasm like 1848, the consequences of this conviction will be too plainly seen.

Another sad and dangerous opinion which the transactions in Hesse have impressed upon the German mind is this:—that no moderation in a free constitution, and no forbearance or strict adherence to law and written contract on the part of those who enjoy it, will be any guarantee of safety, or any protection against the enmity of those courts to whom *any* degree or form of liberty is an eye-sore, an abhorrence, and a reproach. The destruction of the Hessian constitution is a declaration of war against freedom *in the abstract*. The reaction in many states against the democratic proceedings in 1848 has some excuse, and met with some sympathy, even from the liberal European states, because the popular party had neither used their victory with wisdom, nor confined it within the bounds of moderation; but the violation and forcible suppression of the Hessian constitution, which had no fault except that it *was* free, and which contained no more freedom than was necessary to make its provisions a reality and not a mockery, and the tyrannical treatment of the Hessian people, who had committed no definable offence, and had been guilty of no disturbance which could afford even a pretext for the use of force against them, have proclaimed too clearly the code and creed of the despotic princes of Germany, and the principles on which their course will henceforth be guided,—viz., that no semblance of a free constitution shall raise its head within the limits of their influence—that the object of their dread is not popular excess but popular rights—that it is not radicalism or republicanism against which they wage implacable and interminable war, but liberty *as such*, liberty in the most moderate degree, liberty in the most unobjectionable form. A more perilous, demoralizing, revolutionary lesson could not have been taught to the German people, nor one which, when the day of opportunity arrives, will recoil with more fearful retribution on the heads of its foolish and fanatical propounders.

After this account of the destruction of the only really free constitution which Germany could boast of previously to 1848, it may seem paradoxical to say that we are deliberately of opinion that the cause of liberty and progress has on the whole been a gainer by the events of that year, in spite of the extensive and general subsequent reaction. The superficies of European society speaks only of retrogression: but a somewhat deeper and more careful glance will discover many indications which point to a very different conclusion. A few of the more prominent of these we shall endeavour concisely to enumerate.

1. The gain to freedom has been immense—and such as can be cancelled by no subsequent contradictory occurrences—in the discovery of the first fact which the Spring of 1848 proclaimed so emphatically to the world, of the utter hollowness of the ap-

parently solid and imposing structure of European policy, of the internal rottenness of what had looked to the common eye so stable and so sound, of the intrinsic weakness of what had seemed externally so strong. To a few observers, indeed, keener and profounder than the rest, to a few statesmen like Metternich,*—whose long experience, vigilant sagacity, and native instinct, enabled them to pierce below the surface of society, and discern all that was feeble in its seeming strength, all that was unreal in its superficial prosperity, all that was boiling beneath its smooth tranquillity—a suspicion of the truth may have presented itself. But the astounding facility with which revolution after revolution was effected; the feeble pusillanimity with which monarch after monarch succumbed without a struggle or a stroke; the crash with which throne after throne went down at the first menace of assault, like the walls of Jericho before the mere blast of hostile trumpets; the instantaneousness with which institutions of the oldest date crumbled away at the first touch of the popular arm,—betrayed at once to the rulers the secret of their weakness, and to the people the secret of their strength, and inculcated a pregnant lesson which will not be forgotten by either party. Paris, Berlin, Venice, Lombardy, Munich, Turin, Florence, Naples, and Rome—all revolutionized within a month, and all by independent and internal movements, without concert and without co-operation—shewed how ripe for revolt every country must have been, and how ludicrously feeble must have been

* The profound sagacity of this remarkable man was never more shewn than in the accuracy with which he read the signs of the times in the last few years which preceded his downfall. With the gallant resolution of a man of distinct and unshaken purpose, he had conscientiously adhered through life to the principles and ideas of a past age; and our conviction of the entire erroneousness of his aims cannot blind us either to his admirable consistency, his dignified firmness, or his lofty powers. He was a statesman of the order of Richelieu: he knew exactly what he wanted, what he deemed best for his country, and how best to obtain it. But he was at variance with the spirit of the age, and lived a century too late. Still he struggled on. For a long while he trusted that the deluge of democracy which he foresaw could be stayed during his lifetime. But latterly even this hope had deserted him. In the Autumn of 1848, we have the following account of his feelings from the pen of M. von Usedom, a Prussian diplomatist:—"From my personal knowledge I can testify, that he foresaw with absolute certainty the great shipwreck of last Spring (1848.) He spoke to me much at length of the political ruin which threatened to fall on Europe soon, perhaps very soon, and of the even deeper growth and wider range of Radical and Communistic ideas, against which means of repression had proved ineffectual. I could not at that time believe that things had gone so far; but rather thought that the age would take counsel from these events, and learn prudence from the failure of such a policy. 'I am no prophet,' said the Prince, 'and I know not what will happen: but I am an old practitioner, and I know how to discriminate between curable and fatal diseases. This one is fatal: here we hold as long as we can, but I despair of the issue.'" Mazzini gives, in his work, some curious extracts from Metternich's diplomatic correspondence, shewing how much more truly he read the course of events than the generality of politicians, of whatever section.

the power which had been feared so long. The moral influence of such events can never be got over or forgotten; the *prestige* of power is gone; some leaves fall off every time the tree is shaken; and authority once so rudely handled and so easily overthrown, can never resume its former hold upon the mind. Those who have learned how impotent before the fury of an aroused people are all the weapons and array of despotism, will never dread that despotism as they did before; and those who have felt

“The might that slumbers in a peasant’s arm,”

will live in perpetual fear lest it should be again awakened. For a while the wrath of terror may excite monarchs to make a savage use of their recovered power, but this will only be for a time: they have learned the resistless force of their subjects, when once put forth, too recently, not to make them timid and cautious in again arousing it. They know now that they hold their power only on the tenure of a people’s forbearance, and that that forbearance will give way if strained too far. On the other hand, the people who have once, by one great single effort of volition, brought their rulers to their feet, and seen how human, how feeble, how pusillanimous they were, will, in oppression and defeat, remember the events of 1848 as the proof of their own inherent strength, and the earnest of a future day of more signal and enduring triumph.

2. Again: when it came to actual war, in two cases at least, the people proved stronger than their masters. It became evident either that disciplined armies were not altogether to be relied upon, or that there was something in national determination which even disciplined armies could not make head against. In Hungary and in Rome the cause of freedom shewed itself mightier and more stubborn in arms than the cause of despotism. In Hungary, notwithstanding all the difficulties arising from divided nationalities, and the crippling errors of the only just abolished feudalism, the people made head against the whole force of Austria, gained ground month by month, and were morally certain of a complete and final victory, when the aid of Russia was called in, and, in an evil hour for Europe, granted and permitted. Even then the result was doubtful, till aided by internal treachery. That is, it required the combined efforts of the two great Empires of Russia and Austria to conquer the Hungarian people. Hungary, single-handed, was more than a match for the whole Austrian Empire single-handed. If the prompt and vigorous interference of England, France, and Prussia had forbidden, as it easily might have done, the intervention of Russia, how different now would the whole aspect of Europe have been! The whole subsequent oppressions and in-

solences of the Viennese Court would have been prevented. With Hungary triumphant and independent, Austria could not have bullied Prussia, could not have trampled on the constitution of Hesse, could not have conquered Venice, could not have retained even though she had recovered Lombardy, could not have given France even the paltry and miserable pretext for that attack on Rome which has covered both her arms and her diplomacy with indelible infamy. The permission of the interference of Russia was the one great glaring mistake of the time, —the *teterrima causa* of the subsequent reaction, and the present prostration of Continental liberty. *Why* it was permitted by the three great powers, is a question which we fear admits, in the case of two of them at least, of no reputable answer. It is alleged that England's repeated interventions and favour of the constitutional cause in Spain and Portugal deprived her of any just claim to protest against a corresponding intervention by an absolute monarch in favour of absolutism in the case of an allied power. But France could be withheld by no such consideration, and her sympathy and her interest lay in the same direction, viz., in crippling the power of Austrian despotism. Prussia by herself could do little; and whatever were the sentiments of the Prussian nation, the Prussian Court was never itself desirous of the triumph of liberty in any quarter.

In Lombardy, the cause of independence was lost from causes which had no relation to its intrinsic strength. There can, we think, be little doubt that the people who, by no sudden surprise, but by five days' hard and sustained fighting, had driven the ablest warrior and the picked soldiers of Austria out of Milan and to the borders of the Alps, would, if left to themselves, have completed their victory and made good their ground. But it is impossible to read Mazzini's and Mariotti's account of the war, without admitting that the cause never had fair play from the beginning. Charles Albert joined the Lombards from pure dread of a republic so near him being followed by a republic in his own territories; he fought therefore gallantly and well, but he fought for his personal ambition, and to prevent the Lombard republicans from fighting, and his great anxiety throughout was to gain the campaign without their aid. The republicans, on the other hand, mistrusted the king, and were little disposed to shed their blood for the aggrandizement of a dynasty which they had little reason to respect or love; and thus the real cause of Italian independence was compromised and paralyzed at the very outset by mutual and well-grounded mistrust.* Still enough remains, and enough was done, to shew what

* One of the most melancholy features of Mazzini's book is the rooted mistrust, and even hatred, he displays towards the moderate party, whose sincerity and

might have been done, and what may be done again, if either the monarchical party would abstain from encumbering the republicans with aid, or if a monarch would arise whom even the republicans would fight for, and could trust. Enough was done to shew how simple the condition, and how practicable the combinations, by which the battle may be won.

In Rome, too, when the people and their sovereign were pitted singly against each other, the victory was not a moment doubtful. The Pope was powerless—the people were omnipotent; and this, though they, a Catholic and superstitious people, had to fight against spiritual terrors as well as temporal arms. The Pope fled, and was not missed. His return was, indeed, formally asked for; but a republic was organized without him, and, for the first time, the Romans had a glimpse of what good government might be. It was reserved for a foreign, a friendly, and a republican government again to interfere, and deprive a people of the opportunity of shewing how well they could use, and how well they had deserved their freedom. France, which had just chased away her own sovereign, which had just established her own republic, which had just proclaimed the inalienable right of every nation to choose its own rulers, and work out its own emancipation—France was not ashamed to interfere to crush a sister democracy, on the most flimsy, transparent, and inadequate pretext ever urged to palliate a flagrant crime. France, noted throughout the world as the least religious nation in Christendom, was not ashamed to be made the instrument of replacing on the necks of a free people, the yoke of the most corrupt priesthood and the narrowest creed that Christendom ever saw. France, with her 40,000,000 of people, and her army of 500,000 men, was not ashamed to attack a state only just emerged from slavery, and a city garrisoned only by a few thousand untrained and inexperienced soldiers, and *was kept at bay for weeks*. The nineteenth century has recorded no blacker deed within its annals! The recording angel of the French nation, in all her stained and chequered history, has chronicled nothing worse!

Hungary and Rome, then, had cast off the yoke by their own unaided efforts; and their masters, by their own unaided efforts, were powerless to replace it. If the revolutionary years had brought to light no other fact, this alone would have been worth all their turmoil and their bloodshed. The sovereigns of these people at least reign only by the intervention of foreign mercenaries. The Pope is a French proconsul; and the Emperor of Austria is a vassal who does homage for his territories to the Czar of Russia. The people are no longer slaves to their own

capacity he seems entirely unable to admit. It is an ill-omen for the Italian cause when a man like Mazzini is unable to appreciate a man like Azeglio.

rulers, whom they had conquered and expelled. They are simply prisoners of war to a foreign potentate.

3. It is impossible that so many experiments should have been tried, and so many mistakes made, so many failures incurred, so many catastrophes brought about, without leaving much sad but salutary wisdom behind them. Those who were concerned as actors in the events of 1848, and those who regarded them merely as spectators, will, by subsequent reflection, be able to elicit from them much guidance for the future. It was the first time that the popular party, in Germany at least, went fairly and *practically* to school. It was their first attempt in organization and administration, and its lessons cannot have been altogether lost. It may at least be hoped that the *same* mistakes will not be made in future, that in their next voyage they will avoid shipwreck on the same rocks. It would lead us into too protracted a digression were we to attempt a specification of their errors and their faults ; two only of the principal ones we can briefly indicate. In the first place, the want of definite purpose and of moderate boundary, which generally distinguishes popular movements, was early and almost universally apparent. The patriots seldom knew exactly what they wanted, and seldomer still, knew exactly where to stop. Up to the month of May, success and sympathy had everywhere gone with the insurgents. But about that time, it began to be painfully manifest how defective was their wisdom ; how imperfect their conception of their cause and their position ; how ignoble and impure were often the motives which actuated their leaders ; and how completely the sober, the moderate, and the honest were everywhere outbid by the selfish, the ignorant, and the violent—by men whose ambition was restrained by no principle, and whose measures were guided by no reflection—the demagogue by nature, the rebel by temperament, the malcontent by misery, the *émeutier* by profession. One blunder was followed by another, still more serious and criminal ; one leader was cashiered, to be replaced by another of a deeper colour and a lower stamp ; checks and reverses succeeded one another, but seemed to inspire only desperation—not wisdom, nor repentance and retractation ; till throughout Europe the constitutional cause seemed not so much defeated as dishonoured, betrayed and thrown away.

In every country, the friends of movement committed precisely the same series of blunders. They had not yet learned the lesson now taught them, we trust, alike by the successes and the failures of that memorable year—that concessions wrung from sovereigns form the surest basis of a nation's freedom—that it is only by making the most of these, by consolidating and using them, not by pushing them to excess, that constitutional liberty is secured ;

and that to push victory so far as to drive away the sovereign, is, in nine cases out of ten, to resign themselves, bound hand and foot, to the dictation of the mob. They became excited instead of being contented with the vast concessions they had won ;—

“ Nil actum reputans dum quid superesset agendi,”

they grasped at more, in place of employing and securing what they had. They shewed by their attitude, their proposals, and their language, that they were neither intellectually nor morally *masters of their position* ; they were not educated up to the requirements of their new station ; their minds could not rise to a full comprehension of its duties, nor their consciences to a clear comprehension of its responsibilities ; they alarmed where they should have soothed, disgusted where they should have conciliated, (and, alas ! conciliated and temporized where they should have repressed,) dared where they should have shrunk, and, “ like fools, rushed in where angels fear to tread.” They did not understand the business, nature, and limits of constitutional freedom. They committed the fatal error—in their position so difficult to avoid—of tolerating and encouraging even, rather than suppressing, popular turbulence and mob-dictation—of relaxing the arm of the law at the very moment when its strength and its sternness required to be most plainly felt. By these errors and deficiencies they signed the death-warrant of their own ascendancy, by convincing the wise and patriotic that liberty was not safe with them ; the proprietary body that property was not safe with them ; the commercial classes that credit was not safe with them.

In the spring of 1848 there were at least five constituted representative assemblies, sitting in their respective countries, as democratic in their composition as could well be desired,—at Paris, Berlin, Frankfort, Vienna, and Naples. Of the last we shall say nothing, because it had little real action, and we know little of the elements which composed it : but the others were elected by universal suffrage, or nearly so, and presented as motley and miscellaneous an assemblage as could be imagined. Every rank, every class, every passion, every prejudice, every desire, every degree of knowledge and of ignorance, was there faithfully mirrored. Exclusiveness was the only thing excluded. Two of the German assemblies comprised, we believe, upwards of sixty *bonâ fide* peasants each. Here surely, if ever, was the means presented of trying advantageously the great experiment of a popular yet constitutional rule. Yet in every case the experiment failed, and in every case from the same error. These popular assemblies all lost themselves and discredited their cause by the same grand mistake, of stepping beyond their appropriate and allot-

ted province, and usurping functions that did not belong to them. Nowhere do they seem to have understood with any precision the nature of their duties, or the limits of their powers. Where they were *constituent* assemblies, they encroached on the province of permanent legislation; where they were *legislative* bodies, they endeavoured to assume the functions of the executive. Their whole history was one pertinacious effort to concentrate in their own hands all the powers of the State; and in the course of their attacks on the executive, (though we are far from saying that they were always indefensible or without valid grounds for mistrust,) they contrived, by demands which no rulers with the least comprehension of, or respect for, their own position could dream of conceding, to put themselves so completely in the wrong that public sympathy had deserted them long before their fall.

The second mistake, to which we have referred as committed by the friends of freedom in 1848, was the mixing up of two objects, wholly distinct in themselves, and of which the desirableness was by no means equally clear,—constitutional rights and national unity. Both in Italy and Germany, instead of concentrating their efforts on the attainment of free institutions for each separate State, they complicated their cause, and distracted and weakened their party, by raising the standard of freedom and that of unity at the same time. Each object was gigantic in itself; the two together were nearly hopeless. Representative assemblies, a free press, an open administration of justice, were boons which every one could appreciate, and which every one was willing to fight for. The creation of one great state out of the various nationalities of Italy and Germany, respectively, was a dream of enthusiastic theorists, and however important or beneficial it might ultimately have proved, it was not universally desired, and it was surrounded with difficulties which, if not insuperable, demanded at least a peaceful era and a patient incubation for their solution. Many states were by no means willing to merge their distinct individualities for the very questionable equivalent of forming inadequate or inappreciable portions of one unwieldy nationality. How could reasonable men hope that the mutual jealousies, differences, respective claims of Prussia, Austria, Bavaria, Hanover, and Wurtemberg, on the one side, or of Naples, Rome, Florence, Piedmont, and Lombardy, on the other, could be harmonized and reconciled by a constitution struck out at a heat? Moreover, it might well be doubted whether the fusion of so many states into one great and powerful empire, however desirable as an object of European policy, would contribute to the wellbeing of the constituent elements. Hear what Goethe says on this point:—

“I am not uneasy about the unity of Germany; our good high-roads and future railroads will do their part. But, above all, may Germany be one in love, one against the foreign foe. May it be one, so that dollars and groschen may be of equal value through the whole empire; so that my travelling chest may pass unopened through all the six-and-thirty states. May it be one in passports, in weight and measure, in trade and commerce, and a hundred similar things, which might be named. But, if we imagine that the unity of Germany should consist in this, that the very great empire should have a single capital, and that this one great capital would conduce to the development of individual talent, or to the welfare of the mass of the people, we are in error.

“A state has justly been compared to a living body, with many limbs; and the capital of a state may be compared to the heart, from which life and prosperity flow to the individual members near or far. But, if the members be very distant from the heart, the life that flows to them will become weaker and weaker. Whence is Germany great, but by the admirable culture of the people, which equally pervades all parts of the kingdom? But does not this proceed from the various seats of Government? and do not these foster and support it? Suppose we had had, for centuries past, in Germany, only the two capitals, Berlin and Vienna, or only one of these, how would it have fared with German culture? or even with that generally diffused opulence which goes hand in hand with culture? Germany has about twenty universities, distributed about the whole empire, and about a hundred public libraries, similarly spread. How does France stand with regard to such?

“And now, think of such cities as Dresden, Munich, Stuttgard, Cassel, Weimar, Hanover, and the like; think of the great elements of life comprised within these cities; think of the effect which they have upon the neighbouring provinces,—and ask yourself if all this would have been so if they had not for a long time been the residence of princes. Frankfort, Bremen, Hamburg, and Lubeck, are great and brilliant, their effect upon the prosperity of Germany is incalculable. But would they remain what they are if they lost their own sovereignty, and became incorporated with a great German kingdom as provincial towns?”*

The great axiom of political wisdom which we trust the friends of liberty and progress will have learned from the events of 1848 is this, that constitutional freedom must be gained by degrees, not by one desperate and sudden snatch. People must be content to conquer their political and civil rights step by step, as not only the easiest and surest, but in the end the speediest way. Their true and safe policy is to accept and make the most of all concessions which either a sense of danger or a sense of

* *Conversations of Goethe with Eckermann*, vol. ii. p. 104.

justice may dictate to their rulers; to remember that these, small though they may seem to one party, probably seem great to the other, and may have cost harder efforts of self-sacrifice than we can well appreciate,—and that, at all events, they are much as compared with the past; to use them diligently but soberly, as not abusing them; to grow familiar with them; to become masters of them; to acquire, by constant practice, dexterity in the use of them; to consolidate and secure the possession of them; and then to employ them gradually, and as opportunity shall serve, as the stepping-stone to more;—but never, save in the last extremity, to supersede or weaken the executive authority, or to call in the mob. Any attempt on the part of the people to snatch, in the hour of victory, more than they know how to wield, more than they can use well, is a retrograde and fatally false step; it is in fact playing the game of their opponents. If they employ their newly acquired rights and institutions in such a manner as to shew that they do not understand them and cannot manage them, and that, therefore, public tranquillity and social security are likely to be endangered by the mistakes of their excitement and inexperience, the great body of sober and peaceful citizens are quick to take alarm, and carry back the material and moral weight of their sympathies to the side of the old system. Their *feeling*, when expressed in the articulate language of a principle, is simply this—and it is just and true:—all wise and educated people will prefer a free to a despotic government, *ceteris paribus*, i.e., *order and security being predicated in both cases*; but the worst theoretical government which assures these essential predicates, will be, and ought to be, preferred to the best theoretical government which endangers them. The majority of the sober and influential classes will always be found on the side of that party which best understands *the practical act of administration*, however defective or erroneous may be its fundamental principles, however medieval may be its name. If the year 1848 has taught this truth to the movement party, the cause of rational freedom will have gained incalculably by its first disasters.

4. It is not to be denied that the character of the Italians stands far higher in the eyes of Europe than it did before 1848. The various nations of the Peninsula came out of that fierce ordeal with a reputation for bravery, for sustained enthusiasm, for pure devoted patriotism, for capacity of self-government, such as they never before enjoyed. Their conduct in 1848 was of a nature to redeem all their previous failures and miserable exhibitions. It is true that the Lombards, whatever be the true explanation of their supineness, did nothing to fulfil the promise of their first brilliant exploit. It is true that the Sicilians, by a strange fatality of mismanagement, lost all the liberty for which

they had fought so ably and so gallantly, and which they had so nearly won. Still the expulsion of Radetsky, and the entire defeat of Ferdinand, shewed capacities for which neither Milan nor Palermo could have previously gained credit. Both the Piedmontese regulars and the Roman and Tuscan volunteers distinguished themselves by a steady and determined courage, on numerous occasions, which the soldiers of no country could surpass. But it was at Rome and Venice that the Italian nation won her spurs, and made good her claim to join the communion of the noble and the free states of the earth. In the former city, when the Pope had fled, the Republicans organized a government which for five months preserved order throughout the land, such as Romagna had not known for generations, with no bloodshed, and scarcely any imprisonment or exile; indeed, with a marvellous scantiness of punishment of any kind. While, during nearly the whole of this period, Rome, with 14,000 improvised troops, made good her defence against 30,000 French, supplied with the best artillery, and commanded by experienced generals, and Garibaldi drove the invading army of Naples before him like frightened sheep. With such means and against such antagonists it was impossible to have done more: in the face of such hopeless odds few people and few cities would have done as much. For a space of time yet longer, Venice, under the elected dictatorship of one man, put forward energies and displayed virtues which were little expected from the most pleasure-loving and sybaritic city of the world. The wealthy brought their stores, the dissolute shook off their luxury, the effeminate braced themselves to hardship and exertion, and without assistance or allies these heroic citizens kept at bay for many months the whole force of the Austrian Empire, and at last obtained liberal and honourable terms. After two such examples as these, the Italians can never again be despised as incapable and cowardly, or pronounced unfit for the freedom they had seized so gallantly and wielded so well. The comparison of 1848 with 1821 indicates a whole century of progress; and makes us confident, in spite of the cloudy and impenetrable present, that the day of the final emancipation of Italy must be near at hand.

Then Italy and Hungary—how unlike France and Germany—have shewn themselves rich in men not unequal to or unworthy of the crisis. While in the two latter countries, convulsions so deep and startling, exigencies so suggestive and imperative, as seemed especially fitted to call forth whatever genius and greatness might be lying dormant in obscure inaction, waiting for its hour, have brought to light no single man of eminence or commanding character,—while, in those times of trial which test of what metal men are made, many reputations

have been ruined, and none have been created,—in the east and in the south men have sprung up as they were wanted, and such as were wanted. Hungary has produced Kossuth, a writer and a statesman, fitted for any station, “equal to either fortune,” revered, loved, and almost worshipped by his countrymen, in despite of that failure generally so fatal to all popular idols. In Italy—not to speak of Balbo, Capponi, and other less known names—three men of tried capacities and characters have appeared, and made good their claim to be the leaders and organizers of Italian independence, Azeglio, Mazzini, and Manin. As patriotic writer, as gallant soldier, as prime minister of a constitutional kingdom, the first of these has shewn his devotion to Italy and his ability to serve her; and, both as virtual ruler of Piedmont, and head of the moderate party, is probably now the most essential man in the Peninsula. Mazzini, who previously had been regarded as merely an impracticable, fanatical enthusiast, displayed, as chief of the Roman Triumvirate, capacity both for administration and for war, which mark him as the future statesman of Rome, when Rome shall again be in her own hands: while Manin, who, as far as we are aware, was wholly unknown to fame, appeared at the critical moment when the fate of Venice hung in the balance, gifted with the precise qualities demanded by the emergency. When Italy shall be free, we need not fear any lack of men competent to guide her destinies.

5. All these, however, may by some be undervalued or denied as imaginary gains. But one great material fact stands out, an unquestionable reality. The revolutionary and the reactionary deluge have alike swept by, and the Sardinian constitution is left standing. The free institutions established by Charles Albert on the 4th of March 1848, have survived his death, the utter defeat of the Piedmontese army, and the attempts of internal foes, and are still in active and successful operation under the successor of the monarch who granted them, and under the ministry of the nobleman whose labours were mainly instrumental in procuring them. A short sketch of the chief provisions of the constitution will shew its real value, and the immense importance not only to Piedmont, but to all Italy, of its permanence and successful working.

“The State of Sardinia is a Representative monarchy: the throne is hereditary, and the person of the king inviolable. In him is concentrated the whole executive power of the State. He makes peace and declares war; appoints to all offices, and concludes all treaties—with this proviso that any treaties involving taxation or a variation of territory are invalid without the consent of the Chambers.

“The Legislative power resides in the king and the two Chambers

collectively. The Chambers must be convoked every year, but the king has the power of dissolving the Chamber of Deputies. The initiation of laws is common to all three branches of the Legislature. The civil list of the king shall be fixed by the Chambers on his accession to the throne, when he shall take a solemn oath of allegiance to the constitution.

“The Chamber of Deputies is chosen by electors of all classes, who pay a very small amount of direct taxes, all heads of trading or industrial establishments, and parties engaged in arts and professions, (employment in which is assumed to indicate *capacity* and education.) The Deputies are required to be thirty years of age; they are inviolable during Session except for flagrant crime; they are *representatives*, not *delegates* bound by authoritative instructions; they are chosen for five years; and have the right of impeachment over the Ministers.

“The Senate is composed of Members nominated by the King for life, out of a variety of classes; *e.g.*, the Archbishops and Bishops, President and experienced Members of the Chamber of Deputies, the Ambassadors and Ministers of State, the Chief Magistrates and Judges, Generals and Admirals, Members of the Academy of Sciences, and generally all who have rendered eminent services, or done honour to their country. The Senate is, like our House of Lords, the Supreme Court of Judicature of the Realm.

“All citizens, of every class, are equal before the law, and all contribute to the State in proportion to their means. No man can be arrested without legal warrant. The press is free; the right of public meeting is guaranteed; and no taxes can be imposed without the consent of the Chambers.

“The Judges are irremovable after they have served three years. All judicial proceedings are to be conducted in strict conformity to the written law.”

This constitution, which secures civil rights and equal freedom to every citizen—and is, in fact, our own, minus an hereditary House of Peers—has now been in active operation for more than three years, to the general satisfaction of all parties. The Marquis Massimo d’Azeglio, who is at the head of the Ministry, is an able, popular, and well-trying man, who appears thoroughly to comprehend the working of free institutions, and can generally command in the Chambers a majority of two to one. As long as he lives and remains at the helm we have little fear of any mismanagement or serious imbroglio; and it is to be hoped that a few years’ practice may train up many statesmen fitted to succeed him when he shall retire or die. It is scarcely possible, we think, to estimate too highly the ultimate gain to the cause of liberty and good government throughout Italy, by this establishment of a constitutional limited monarchy in one corner of the Peninsula. It will be impossible for either Austria or the smaller states to govern so despotically as they have done, with

such a reproach and such an example at their side. It will be impossible, also, for the radical party any longer to declare that no substantial liberty can be enjoyed by Italy except under a Republic. On the one side it will shame tyrants: on the other, it will instruct freemen. In time of peace it will train up patriotic Statesmen for future emergencies; in time of disturbance it will be a banner to rally round. It will give Italians a definite example to follow—a definite object to demand. It will shew that even in Italy liberty is not incompatible with order and progress, and will, we trust, pave the way to a national prosperity, that may excite at once the admiration and the emulation of surrounding States. Piedmont, though defeated at Novara, may yet on another field, with nobler weapons, and in a higher sense, be the regenerator and emancipator of Italy.

In the other States of Italy, though not a trace remains of their transient liberal institutions, though the press is silenced, and every book of interest or value is prohibited, though the most stupid and cruel oppressions are daily accumulating wrath against the day of wrath, though the Pope has returned to his vomit, and the Neapolitan sow to its wallowing in the mire,—yet no man who is acquainted with the internal feelings of the country has lost heart. The passion for liberty, independence, and nationality, has enormously gained ground; the municipal jealousies which divided the several sections and cities of the Peninsula have been materially weakened; the Papal tyranny is becoming daily more odious;—the Mazzini party, as it is called, is admitted even by its opponents to be rapidly spreading;—and if the impatient man who is at its head can have forbearance to bide his time, and wait his opportunity, it may well prove that the day of deliverance is far nearer than is thought. When that day comes, it is more than probable that the conduct of the people, and the result to princes, will be very different from those last displayed.

- ART. IV.—1. *A Manual of Botany, being an Introduction to the Study of the Structure, Physiology, and Classification of Plants.* By JOHN HUTTON BALFOUR, M.D., F.L.S., F.R.S.E., Professor of Medicine and Botany in the University of Edinburgh. 1849.
2. *The Plant : a Biography.* By M. T. SCHLEIDEN, M.D., Professor of Botany in the University of Jena. Translated by ARTHUR HENFREY. 1848.
3. *Principles of Scientific Botany ; or Botany as an Inductive Science.* By Dr. J. M. SCHLEIDEN. Translated by EDWIN LANKESTER. 1849.
4. *On the Archetype and Homologies of the Vertebrate Skeleton.* By RICHARD OWEN, F.R.S. 1848.
5. *On the Nature of Limbs.* A Discourse by RICHARD OWEN, F.R.S. 1849.
6. *The Typology of Scripture. Investigation of Principles and Patriarchal Periods.* By Rev. PATRICK FAIRBAIRN, Salton. 1847.
7. *The Typology of Scripture. Mosaic Dispensation.* By Rev. PATRICK FAIRBAIRN, Salton. 1847.

Two great principles, as it appears to us, run through every part of the works of God. The one is the principle of Order, or a General Plan, to which every given object is conformed with amazing skill. The other is the principle of Special Adaptation, by which each object, while formed after a general plan, is at the same time and by an equally wonderful skill, accommodated to the situation which it is meant to occupy, and the purpose which it is intended to serve.

These two principles are characteristic of intelligence. They may be discovered, though necessarily to a limited extent, in human workmanship. When circumstances admit, man constructs his works upon a general plan. We see it in the corn-yard of the farmer, who builds up his grain in forms which are after a particular mould. We detect it in the shop or wareroom of the merchant, where the articles are disposed in drawers of a like shape, or bound up in parcels of equal weight. Human intelligence delights to employ itself in forming such models. They seem to have a beauty to the eye, or rather to the mind, which contemplates them. Human convenience requires them. It is only when his possessions are so arranged that man can be said to have the command of them. Were his property not so disposed, were his grain gathered into heaps of all sizes and

shapes, were his merchandize scattered in every corner of the apartment, the possessor would become bewildered in proportion to the profusion and variety of his wealth.

While we see so obviously in the works of man the general model, we may also discover the principle of special adaptation. The farmer's stacks are all formed after a general mould, but we may observe a departure from it on either side to suit the quantity or quality of the grain. The merchant's shop seems to be regulated by forms and weights, but there is a special form and a model weight for every separate article.

We insist on having these two principles of uniformity and variety in all the higher works of man. We have them in a well-furnished house, where we see the one side of the chair and table of the same shape and size as the other side, but where there is also a variety in one kind of chair or table being after a different model of beauty from another. We see both illustrated in those pieces of furniture, in which there is something on the one side not of the same shape as something on the other side, but the counterpart of it, and intended to balance it. It is in the way of exhibiting these great principles, that we find in all the higher forms of architecture, a general correspondence in the whole, with a graceful diversity of particular parts. It is possibly because we insist on having these two principles in all the higher kinds of art, as we certainly find them in all the nobler departments of nature, that we have a central figure with other figures grouping around it, in all our finest historical paintings. The mind naturally constructs its workmanship in accommodation to these rules, and finds as it does so that it is ministering at once to the convenience and the delight of all intelligent beings.

Now, if this world proceeds from intelligence, if it is addressed to intelligence, we may expect to find in it the same two grand principles. We do find, we think, abundant illustrations both of the one and of the other.

The Principle of Order assumes a great diversity of forms. It may be an order, for instance, in respect of number, as when we find the threefold and fivefold symmetry prevailing to such an extent in the vegetable kingdom, and find all the laws of nature capable of a quantitative expression. It may exhibit itself in a beautiful conformity of colours, such as we find in the plumage of so many birds, and the spots and stripes on the skins of so many wild beasts, a conformity which does not, as Mr. Ruskin tells us, follow the physiological or anatomical structure of the animal, but follows a beautiful order of its own. Or it may be a uniformity in respect of form, and it is this that we are now specially to investigate. It cannot surely be either an unpleasant

or unprofitable inquiry which carries us into the very midst of that order and harmony which are so characteristic of works, which proceed, we must believe, from Infinite Intelligence.

But coincident with this principle, there is another, that of Special Adaptation, also running through the works of God. While there is a general form of limb, for instance, found in all mammals, there is a particular form to suit every given species, and the particular form is admirably suited to the circumstances in which the animal is placed, to the food provided for it, and the purposes which it is meant to serve. It must be no less interesting surely to discover the exceptions as well as the rule, to perceive how the exceptions fall under a different rule, and to find that the diversity is as beneficent as the uniformity.

After tracing this mingled uniformity and diversity throughout the more important kingdoms of nature, the vegetable and the animal, we may further inquire whether we do not meet with something similar in the dispensations of grace also, as revealed in the word of God, especially in the typical symbols, persons, and events described in the Old Testament. We say something similar—for it will at once be seen, that if our views are correct, there will with the uniformity be also a diversity. The typical system of the animal kingdom is of a different order from the typical system of the vegetable kingdom; and when we rise from matter to mind, from nature to revelation, we may expect to find the typical system, if there be a typical system, of a higher kind than that which pervades the organic world. But we can shew that each furnishes like evidences of lofty intelligence, and that all are equally suited to the same or similar principles in the constitution of man's mind. With such diversities as we might anticipate, and these diversities meant to serve a special purpose, we find a *system of types* running through the works of God, and this system adapted with wonderful skill to the objects to which it is applied.

To begin with the inorganic world. According to the creed which has been commonly adopted in modern times, matter is composed of atoms, and these atoms have regular forms. According to Sir Isaac Newton they are spherical, according to Dalton each has a specific magnitude. If these views be correct, we discover forms playing an important part in the original structure and composition of the material universe. On breaking up the rocks of the earth, we find in most of them a regular or crystalline form in the component parts, from which it has been argued that they are crystalline throughout. It is distinctly ascertained that minerals crystallize in the most regular manner, and that each mineral has its own crystalline form. Häüy, Mohs, and others, have reduced these crystals to certain

primitive forms, and minerals have been classified according to the form which they assume in crystallization. But it is evident that the rocks, as ordinarily presented to the eye, do not take any such regular form. On the contrary, nothing can be more disorderly than the common appearance of the rocks and earths, as they are found on the surface of our globe. At first sight we might be apt to complain of this, but on reconsideration we may easily be convinced, that if the surface of the ground had been covered with crystals, even though these had been crystals of gold or diamond, it would have been as inconvenient for man as the power given to Midas of turning all things which he touched into gold, and would not even have gratified his sense of beauty. The system of nature is a system of regularity amidst regular irregularity. The graceful forms of the organic world rise most beautifully from amidst the prevailing irregularity of the soil and rocks on the surface of the ground.

Still, the inorganic world is not without its morphological regularities. Each satellite is of the same form as its planet, and the planets are of the same shape as their sun. All the heavenly bodies seem to move in similarly shaped, that is, elliptic orbits. No doubt there are irregularities, as in the ring of Saturn; but occasional irregularities under the same grand law are as much the rule of God's kingdom as fixed and squared regularities. But it is in the Vegetable and Animal Kingdoms that we find *morphology* coming forth most prominently.

As all matter, organic and inorganic, is supposed to be formed of regularly shaped atoms, so organic matter, vegetable and animal, is now believed to originate in cells. The cellular structure of plants was discovered as early as the seventeenth century, by Robert Hooke, who used an instrument brought from the Continent, and was farther developed soon after by Malpighi, a professor at Bologna. It is now acknowledged that cells are the primary elements of all vegetable life, and by means of improved microscopes, physiological botany is trying, though as yet with but partial success, to penetrate the mystery of life, and to discover the way in which cells are formed. These cells are little vesicles, composed of a membrane usually transparent and colourless as water. According to Schleiden, the cell membrane, in its young state, is perfectly closed, but permeable to all fluids. It contains a fluid thicker than water, and this fluid having commonly an affinity for water, there is a constant passing in of water, and a passing out of the concentrated fluid from the cell. These cells vary in size, but may average $\frac{1}{1000}$ th part of an inch in diameter. It is calculated that in some fungi they are generated at a rate of sixty-six millions in a minute. When allowed to develop themselves freely, they take a glo-

bular form. When supplied with nutrition unequally, they take more flattened or elliptic shapes. When a number of cells press on one another they become many-sided. When perfectly formed cells of the same size are allowed to press against each other, they will be seen as beautiful rhombo-dodecaedrons under the microscope. The individual cells are grouped together in a variety of ways into great masses called tissues, which are of various kinds, and go by various names. The simplest is the parenchyma, formed by an agglomeration of cells. Then there are the vessels, formed by a row of lengthened cells, whose cavities through resorption have been brought into continuous communication; and there are the vascular bundles composed of a mass of lengthened cells, formed partly into vessels and penetrating the parenchyma. "The cell," says Professor Balfour, in his admirable elementary work on Botany, "is the basis of all vegetable structure. It is of equal importance as regards function. In the lowest plants cells constitute the whole substance, they absorb and assimilate, thus performing the functions of nutrition and secretion, and they form new cells, thus reproducing individuals like themselves. When a more complete structure exists, as in the higher tribes of plants, certain cells are appropriated for absorption, others are concerned in assimilation, and others in forming and receiving secretions. When a certain degree of solidity appears to be required to support the stem, leaves, and flowers, ligneous substance is deposited, and woody fibre is formed. When the transmission of fluids and air is carried on rapidly, the elastic fibres of the fibrovascular tissue seem to keep the elongated cells and vessels pervious; and when the elaborated sap is conveyed continuously, without interruption, anastomosing tubes occur in the form of laticiferous vessels." It is out of these cells, chemically and mechanically compound, but vitally simple, each possessing a perfectly independent life, the law of which has not been ascertained, that all the plants of the earth with their infinitely diversified shapes and functions are formed. These cells are the living stones of which this great temple of nature is built. The life of the plant is the result of the life of its individual cells. It is not unworthy of being noticed, though at present little can be founded upon it, that certain numbers occur in the formation of young cells, in by far the majority of cases, two, four, and eight young cells being formed within the parent cell.

The natural shape of the cell is the globular, a form unseen by the naked eye. The first regular form which falls under the notice of the unassisted vision is the spiral, a figure which combines in itself our two principles of unity and variety. The microscope first of all shews us this form, appearing in the inner

surface of the cell. When the cell has reached a certain degree of development, the cellulose is deposited upon it as a concrete layer which takes the figure of a spiral band. But the spiral figure also appears in parts of the plant which strike the naked eye. The arrangement of leaves and of other appendicular parts round the stem or axis of a plant is very frequently spiral. Leaves seem to be arranged in a more or less spiral manner. Thus, in the case of the apple, the pear, the willow, the oak, and many other trees, if a line be drawn round the tree, from the base of one leaf to the base of another, it will be found that a perfectly spiral line has been described. Lindley thinks it probable that the normal position of all leaves upon the stem is alternate, and consequently that a line joining these bases will be an elongated spiral. The scales of the pine and fir cone are arranged in spires, and between these spires there are certain arithmetical or mathematical relations of a most singular description, which have given rise to curious speculations. It has been laid down by some botanists as a general fact, that beginning with the cotyledons or seed-lobes, the whole of the appendages of the axis of plants, leaves, calyx, corolla, stamens, and carpels, form in their normal state an uninterrupted spire governed by laws which are nearly constant. The spiral tendency is likewise seen in climbing plants and the tendrils of plants, as also in the twining stem of some plants, which look as if they were twisted round their own axis.

With the exception of the spherical forms of individual cells, which are unseen by the naked eye, no regular mathematical figures are to be found in the shape of plants or the parts of plants. All this is in striking accordance with the native principles of beauty implanted in the human mind. Had our trees been triangular, our shrubs quadrilateral, and our grasses spherical, we feel that we should have been constrained to do what Pascal did, to shut up our casement, that we might not see the landscape; but from motives very different from those of Pascal, for while he durst not look on Nature's scenes because they were so beautiful, we would not be able in these circumstances to look upon them because they were so ugly. When the commonwealth of taste is properly constituted, one of its first laws will be passed against the clipping of boxwood and holly, and the common pruning of trees, which has no respect to their natural form. We can excuse the old Scotch earl who planted his trees in groups to represent the troops which gained a victory under him, because, while he thereby spoiled the beauties of nature, he gave us some insight into the military art; but those who form spherical yews and conical laurels, should themselves be subjected to a similar pruning process, because of the offence which

they commit against nature without, and nature within us. Meanwhile, let us be grateful that no such enormities are committed in the works of God. There is attention at once extensive and minute paid to form in the vegetable kingdom, but this form intentionally admits of variety along with the unity. The unity is sustained by the symmetry, or the two equal or balancing sides, which appear in the plant as a whole, and in all its foliar appendages; and the variety is exhibited in the infinitely diversified waving lines of their outline as seen between us and the sky in the back-ground. It is a circumstance worthy of being noticed, that while the even numbers, 2, 4, 8, prevail in the formation of cells which are unseen without artificial aid, the uneven numbers, or a centre with two sides, appear in the ramification of branches, the venation of leaves, and the whorls of flowers. Naturalists divide the vegetable kingdom into monocotyledonous, which are also endogenous, and dicotyledonous, which are exogenous plants; and it is found that three is the typical number in the former, and five, the typical number, in the latter class.

But it is in the external forms of plants that we see this doctrine of types most strikingly exhibited. The department of botany which treats of these forms is called Morphology. Lindley represents it as the basis of all scientific knowledge of vegetable structure; Schleiden speaks of it as the most important section of botany; and Professor Balfour says, it is now the basis of organography, and he has kept it in view throughout his whole treatment of the organs of plants. This department of botany was unknown before the time of Linnaeus, and even he had but a limited notion of its importance. It was first presented in its true light by the great German poet Goethe, who, though not learned in the artificial systems at that time taught in the schools, had a fine eye for the objective world. As Goethe had no name among the initiated, his views were long neglected by the scientific world. It was about thirty years after they were published that they were brought into notice by De Candolle and others. Under some modifications they have now commanded the assent of the most sagacious and practical of British naturalists, men slow to admit German theories in any case, and who never do admit them till they have accommodated them to their own common-sense type.

The fundamental law of morphology is, that certain plants are constructed upon the same general plan. The perfect plant may be regarded as composed of two essentially distinct parts, the STEM and the LEAF. Looking first to the STEM, we find the whole skeleton of the plant composed of a number of stems developed the one from the other, in lineal succession. The stem going downwards becomes the root, and proceeding up-

wards becomes the trunk. From the main stem, both in its upward and downward course, there proceed lateral stems or branches, and these lateral stems may again send out other stems or branchlets. It is to be observed, that these stems are all as it were repetitions of each other. The main stem, all the lateral branches, and the branchlets proceeding from these, are of the same structure, and tend to assume the same form. "If a thousand branches from the same tree are compared together," says Lindley, "they will be found to be formed upon the same uniform plan, and to accord in every essential particular. Each branch is also, under favourable circumstances, capable of itself becoming a separate individual, as is found by cuttings, budding, grafting, and other horticultural processes. This being the case, it follows, that what is proved of one branch is true of all the other branches." Thus the smallest branchlet becomes a type of the branch on which it grows, and the branch a type of the trunk from which it springs. Knight and Du Petit Thouars delight to represent every plant as composed of an assemblage of individuals, each, as it were, with a separate life, and capable in certain circumstances of living independently, and it has been customary to designate the individual part or plantlet by the word *phyton*. It should be remarked at the same time, that though the plant is composed of a number of individuals, yet that these are so arranged as that the whole is one individual.

The other essential part of the plant is the LEAF. First we have the leaves properly so called, which commonly have a simpler form low down on the stem, assume their fully developed figure farther up, and return to greater simplicity at the extremity. Then we have leaves metamorphosed into a number of other organs; indeed, it is now acknowledged that all the other parts of the plant, except the stem, can be reduced to this type. "Linnaeus," says Schleiden, "had a presentiment of something of the kind, and in his *Prolepsis Plantarum* carried it out in such a way that, starting from the consideration of a perennial plant, with regular periodicity of vegetation, as in our forest trees, he explained the collective floral parts, from the bracts onward, as the collective foliar product of a five-year old shoot, which by anticipation and modification was developed in one year. This view is, in the first instance, taken from the most limited point possible, from the examination of a plant of our climate; and, secondly, imagined and carried out with great want of clearness." The first correct statement of the doctrine was made by C. Fr. Wolff, (*Theoria Generationis*, 1764,) but his treatise lay neglected till the truth had become established through the influence of others. Goethe wrote his *Versuch die*

Metamorphose der Pflanzen zu erklären, in 1790, a work which has laid the foundation of morphology as a department of botany, and of scientific botany as built upon it. The botanists paid little attention to his ideas, till long after when they were mentioned by Jussieu, and brought into general notice by the *Organographie* of De Candolle, published in 1827. The doctrine of the metamorphosis of plants is now acknowledged by all the great doctors, and has been sanctioned by the great councils of science.

Looking to the flower or inflorescence of a plant, we have first of all the outer cup or calyx, composed evidently of leaves called sepals, which are commonly of a green colour. Within this we have the corolla, or flower in the narrow sense of the term, composed of leaves called petals, alternating with the leaves of the calyx. Within this whorl we have the stamens, which are metamorphosed petals, and which do, in certain circumstances, become petals. In the centre of the inflorescence is the pistil with the seed vessels. Linnaeus had no idea that this could be a foliar organ. We owe the proper conception of the seed vessels to Goethe, who thus writes, "Keeping in view the observations that have now been made, there will be no difficulty in discovering the leaf in the seed vessel notwithstanding the variable structure of that part, and its peculiar combinations. Thus the pod is a leaf which is folded up and grown together at its edges, and the capsule consists of several leaves grown together, and the compound fruit is composed of several leaves united together round a common centre, so as to form a communication between them and their edges adhering together." Thus we have the organs of the inflorescence, calyx, corolla, stamens, and pistils reduced to foliar organs. Not that we are to regard them as leaves properly speaking, or even as metamorphosed leaves, for they never have been leaves, but they are formed after the same plan as leaves, but modified to suit the special purpose which they have to serve.

According to this idea a plant is composed of two essentially distinct parts, the stem and leaf. The leaf is formed upon the ascending stem, and besides its common form it assumes, while obeying the same fundamental laws, certain other forms, as bracts, sepals, petals, stamens, and pistils. Schleiden in his "Plant, a Biography," gives us a picture of a typical plant constructed on this principle. This makes a plant a dual, or composed of two essentially different parts.

But we have at times thought it possible to reduce a plant by a more enlarged conception of its nature to a unity. According to our idea, it consists essentially of a stem, sending out other stems similar to itself at certain angles, and in such a regular

manner that the whole is made to take a predetermined form. The ascending axis, for instance, sends out at particular normal angles for each tree branches similar in structure to itself. These lateral branches again send out branchlets of a like nature with themselves, and at much the same angles. The whole tree with its branches thus comes to be of the same general form as every individual branch with its branchlets, and every branch with its branchlets comes to be a type of the whole plant in its skeleton and outline.

Taking this idea of a plant along with us, let us now inquire whether there may not be a morphological analogy between the stems and the ribs or veins of the leaf. The veins of the leaf are vascular bundles proceeding from the fibrous matter of the stem, and may very possibly tend to follow the same laws. We are quite aware that in respect of physiological development there is a difference between the two, but this shall just render the morphological resemblance if it exists the more striking. We begin with the examination of those plants which have a fully veined or reticulated leaf. In maintaining that there is a morphological analogy between the ramification of the stems, and the venation of the leaves, we always assume, *that both stem and leaf are fully and fairly developed.*

In prosecuting this inquiry let us first inspect in a general way the leaf of a tree, with its central vein or veins, and its side veins. Even on the most careless inspection the central vein will be found to bear a striking analogy to the central stem or axis of the tree, and its side veins to the branches. Having viewed the leaf in the first instance, let us then look at the tree when stripped of its leaves in winter, and we may observe how like it is in its disc and in its skeleton to the disc and skeleton of the leaf. We shall be particularly struck with this if we view it in the dim twilight, or the "pale moonlight" between us and a clear sky. In both leaf and tree we see a central stem or stems, with lateral stems going off in a ramified manner at certain angles, and we may observe that the tree in its outline tends to assume the form of a leaf.

The general impression produced by a first glance will be confirmed on farther inspection. The analogy between the skeleton of the leaf and the skeleton of the whole tree may be seen in a number of special points, as well as in the general fact that the stems and the veins are both ramified. (1.) Some trees, such as the beech, the elm, the oak, and the greater number of our ornamental lawn bushes, as the holly, the Portugal and bay laurels, the privet, the box, will be found to send out side branches along their stem from the very root, or near the root, and the leaves of these trees will be found to have little or

no petiole or leaf-stalk. Other trees, again, such as the common sycamore (the Scotch plane), the birch, the chestnut, the lime, the pear, the cherry, the apple, have a pretty long unbranched trunk, and the leaves of all these trees have a pretty long leaf-stalk. (2.) Most of our low, bushy, branching herbaceous plants, such as tussilago, rhubarb, mallow, marsh marigold, lady's mantle, send out simultaneously a number of stems or stalks from the root or near the root; and it will be found in exact correspondence with this, that there run off from the base of the leaf a considerable quantity of main veins or ribs, which make the leaf assume more or less of a circular form. In this respect these plants are different from our forest trees, which send up commonly one main axis with lateral branches, and have in their leaves one leading vein with side veins. (3.) Some trees, such as the beech, the birch, the elm, the oak, send up one large main stem, from which, throughout its length, there proceed comparatively small branches pretty equably along the axis, and it will be found in such cases that the leaf has a central vein with pretty equally disposed veins on either side. Other trees, again, tend rather to send off at particular heights a number of comparatively thick branches at once. This is the case, for instance, with the common sycamore, the chestnut, and laburnum. The trunk of the plane tree, about eight or ten feet above the surface of the ground, commonly divides itself into four or five large branches, and in precise analogy, we find the leaf, at the top of a pretty long leaf-stalk, sending off five large veins. The chestnut often sends off at the top of its unbranched trunk a still greater number of branches, and we find in correspondence with this that its leaf is commonly divided into seven leaflets. The laburnum (and also the broom and clover) go off in triplets both in respect of veins and branches. In such cases it will commonly be found that the leaf is compound, *and we are to regard all such compound leaves as the proper representative of the whole tree.* (4.) The leaves of some plants, such as the rhododendron, the azelia, and the lupin, have a tendency to assume a whorled arrangement, and the branches of these plants also tend to become verticillate. (5.) The stems of some trees, such as the thorn and laburnum, are not straight, and the branches have a twisted form, and it will be found in such cases that the venation is not straight, and that the leafage is not in one plane. (6.) In some trees, such as the beech, the branches go off in nearly straight lines, and the leaves are found to have a straight venation. In other trees, again, such as the chestnut, the branches have a graceful curve, and the veins of the leaves are curved in much the same manner. (7.) In most plants the angle at which the side stems

go off will be found to widen as we ascend to the middle of the tree, and thence to decrease as we ascend to the apex; and the venation of the leaves will be found to obey a similar law. This structure helps to give to both tree and leaf the graceful curve by which their outline is distinguished. In other trees, such as the birch and poplar, the angle both of ramification and venation is widest at the base, and will be found to decrease as we ascend, giving both to the coma of the tree and the leaf a kind of triangular form. (8.) Generally, after having made a number of measurements, we think we have discovered a general correspondence between the angle of the ramification of the tree and the angle of venation of the leaf. This investigation, however, requires to be conducted with a considerable amount of caution. For while it is not difficult to discover the angles of the veins of leaves, it is far from being easy to find the normal ramification of a tree, for the angle at which the branch goes off is modified by a vast number and variety of circumstances, natural and artificial. All that we argue for is a *tendency* in the ramification and venation to obey the same laws.*

We are strongly inclined, then, to the opinion that in plants with leaves that strike the eye, the leaf and plant are typically analogous. The leaf is a typical plant or branch, and the tree or branch a typical leaf. We are quite aware of the differences which exist between these two distinct members of the plant. In particular, we find in the case of the full tree that branches go off all round the axis, whereas in the leaf the fibrous veins all lie in one plane. But then we have something to connect these two in the branch, the branchlets of which commonly lie in one plane. The principal difference between the tree and leaf may possibly be found to lie in this, that the cellular tissue or parenchyma, which in the tree and its branches is collected into the pith and bark, (which are connected by the medullary rays,) is in the leaf so spread out as to fill up the interstices in the fibrous matter which forms the veins.

The general order, as thus stated, can apply only to plants which have pith and bark, and which have fully formed veined leaves intended to strike the eye. In the plants with linear unbranched leaves, such as firs and pines, the order is modified to suit the different physiological structure and different form of the plant. Here the leaf does not correspond to the branch or tree, but merely to the stem. But here, too, we discover the same grand typical principle in every internode being of the

* We use this language because it will require farther investigation to determine the extent or limits of the general view now advanced. We shall be satisfied if this article leads men of science to pursue this investigation, even though this should occasion the partial modification of some of our special statements.

same form as every other, in every branch taking the form of the whole tree, in the growing or topmost internode with its leafage being of the same outline as the whole tree or branch on which it grows, and in the very cones being in many instances types of the whole tree and of every branch.

We are not prepared to say how this principle is carried out in the monocotyledonous plants. Some of these, such as our common grasses and lilies, have no branches, and the leaves of these plants have their veins parallel, or nearly parallel, to each other. In order to discover the law of order in the case of the palms, they would require to be examined in their native climes. Some plants of this class, such as the dictyogens of Lindley, to which belong yams, have branches like our ordinary forest trees, and it is a curious circumstance that the leaves of these plants have a reticulated structure.

So far as fungi, lichens, algæ, and the whole acotyledonous plants are concerned, it is evident that they present a repetition both of homotypal parts and of homotypal arrangement of parts or forms, and thus illustrate our general doctrine, that throughout the vegetable kingdom the parts are similar to one another, and in nice accordance with the whole.

Generally, we are inclined to regard the fibrous veins of the leaf as bearing a morphological analogy to the stems of the tree. The root, the stemmage, and the leaf are, in our view, the three distinct members of the fully developed plant,—these three parts, however, being morphologically allied, so that, to adopt the phraseology of Professor Owen as applied to another subject, (which we are now to examine,) they may be called homotypes. The plant thus becomes a unity with unnumbered diversity of parts.

We turn to the science of Comparative Anatomy, which furnishes illustrations of the same great principles. There was in the last age a famous controversy, which may be summarily represented as a dispute as to which of these two great principles we should discover in the animal structure. This controversy should now be regarded as settled in the discovery of both principles. The most illustrious comparative anatomist of the last, or indeed of any age, proceeded in all his investigations on the principle that every particular member of the animal body had a special use or final cause. Attached to this principle, and having found how prolific it was, in his hands, of brilliant discoveries, Cuvier was not very willing to admit a general correspondence of parts which could have no reference to the well-being or special functions of the animal. On the other hand, his great co-operator and rival, Geoffroy St. Hilaire, was accus-

tomed to speak in a scoffing manner of the doctrine of final causes, and delighted to trace a unity of plan running through the bones of the skeleton. The doctrine of final causes, as illustrated by the former, was made to furnish numerous and, we believe, incontrovertible proofs of the existence of a Supreme Intelligence; while the doctrine of a general plan, irrespective of the animal wants, was turned, as we think, most illogically, against the cause of natural religion. This controversy became still more embittered when Lorenz Oken, attached to the pantheistic school of Schelling, developed his doctrine of the brain being a vertebrate column. Some we suspect supported the doctrine of a physical uniformity of parts because it seemed to deliver them from the necessity of calling in final causes, while not a few regarded it with suspicion because it seemed to be atheistic or pantheistic in its tendency. There was a still greater repugnance felt to the doctrine of Oken on the part of many British anatomists, because of the transcendental method which he employed in developing it, and the mysticism in which it was embedded. We owe to the greatest of living comparative anatomists, the clear and correct statement of the great truth of a unity of plan running through the whole vertebrate skeleton; and his statement of the doctrine has been followed by its almost universal adoption. Professor Owen's views were first partially given to the public in the *Geological Transactions* for 1838, and were afterwards more fully developed, and communicated to the Royal College of Surgeons in the *Hunterian Lectures* for 1844 and subsequent years, and to the British Association at its meeting at Southampton in 1846. The public have now the matured and complete results in the great work on the *Archetype and Homologies of the Vertebrate Skeleton*, published in 1848, and in a *Lecture on Limbs*, published in 1849,—works which will constitute an era in the progress not only of comparative anatomy, but of the theistic argument as founded on the structure of the animal frame. The old controversy should now cease in the adoption of both doctrines, that of a general homology and that of a special adaptation of parts; and the former properly interpreted will be found, we are convinced, to yield as rich a contribution to the cause of natural theology as the latter.

By a "Homologue," Owen means the same organ in different animals under every variety of form and function. Thus, the pectoral fins of the fish, the wings of the bird, the fore-feet of the mammal, and the arms and hands of man, are said to be homologous parts, because they are really the same organs under different modifications. Such homologies as these have long been noticed even by the unscientific observer. But anatomists have now demonstrated, that in comparing one species

of animal with another there are similar homologies in every part of the skeleton. Professor Owen furnishes us with a plate forming a perfect study in itself, in which we have a series of about seventy homologous parts traced through all the vertebrate series of animals from fishes up to man. In this plate we have, first, an imaginary figure, an archetypal skeleton; secondly, the skeleton of a fish; thirdly, of a reptile; fourthly, of a bird; fifthly, of a mammal; and, sixthly, of man. In contemplating this plate we are invited to observe how an immense number of bones marked each by its number in the skeleton, and designated by its common scientific name in the margin, are to be found in the fish, the reptile, the bird, the mammal, and man, thus proving that they are formed after a common model. But while the same parts or organs are found in each of these classes of vertebrate animals, they are made to assume very different positions and sizes, in order to suit the particular species of animal. Thus, the fore-limbs become fins in fishes, claws in reptiles, wings in birds, long bounding legs in mammals, and arms and fingers in man. There is shewn to be a similar transformation of the rest of the seventy homologous parts to suit the convenience of the living creature.

In his great work on the Homologies of the Vertebrate Skeleton, Professor Owen treats, first, of special homology, or the homology of special organs. He next discusses general homology, and shews that there is not only a homology of certain organs, but a general plan or homology for the whole vertebrate skeleton. In the third place he treats of serial homology, and shews that the vertebrate skeleton is made up of a series of segments, which he calls "homotypes," repeating each other. We shall dwell for a little on these serial or repeating homologies, as illustrating our doctrine of similar parts being made to appear ever and anon throughout the kingdoms of nature.

The characteristic of the higher class of animals is the possession of a back-bone or vertebrate column. This column is composed of a series of segments or similar parts succeeding each other in the axis of the body. "These segments are not, indeed, composed of the same number of bones in any class, or throughout any individual animal; but certain parts of each segment do maintain such constancy in their existence, relation, position, and offices, as to enforce the conviction that they are homologous parts, both in the constituent skeleton, and throughout the series of vertebrate animals. For each of these primary segments, I retain the term vertebra." Professor Owen then exhibits what he reckons an ideal typical vertebra. It has a solid central part, a centrum which serves to give rigidity to the body, and support to the limbs. Above it, and forming a protection to the great

nervous chord which comes down the back, is the neural arch, composed of two neural processes (apophyses), surmounted by the neural spine. Below it, and covering the great descending artery and the other vital organs of the body, is the hæmal arch, composed of two hæmal processes, with the hæmal spine. On each of the sides of the centrum there is also a canal circumscribed by a costal process, and by two transverse processes. Besides these processes, there are also two articular processes connecting the parts of the neural and hæmal arches. The typical vertebra is thus composed of ten separate parts, a centre, a neural and hæmal spine, and seven processes which also support diverging appendages to be afterwards spoken of. Now, if we examine the several joints of the back-bone we find these essential parts appearing, though under very different modifications, from the top of the neck to the tip of the tail. These parts, indeed, are in some parts of all animals so altered from their typical form, that it is difficult to detect them. Still the skilful anatomist can trace them under all their various modifications, and finds it convenient to describe them by common names. Certain of the processes (apophyses) are in the body of the animal, ribs to protect the great vital organs. In the neck we do not find ribs, because they would injure the free motion of the neck; but we do find the rudiments of ribs. In the tail we have no ribs, but we have the homologous processes employed to embrace certain blood-vessels. Thus, from tail to neck inclusive, the vertebrate skeleton is composed, throughout all animals from fishes to man, of a series of parts essentially of the same order, but wonderfully modified to suit the function which the organ has to perform in the given species of animal.

So far these views will readily be acknowledged even by the anatomists of the school of Cuvier, who did much to establish the doctrine. But comparative anatomy is seeking to go beyond this, and would represent the skull itself as composed of a series of vertebræ. It would appear that Goethe had been dabbling in this subject also before the end of last century; but it was Oken, proceeding on a favourite idea of the school of Schelling that we are to seek the repetition of the whole in every part, who obtained the first clue to the discovery in August 1806. Walking one day in the Hartz Forest, he saw before him the blanched skull of a deer, and picking up and contemplating the bones, the thought flashed across his mind, "This is a vertebrate column." He afterwards tested and matured this idea, by examining the skulls of a cetacean, a chelonian, and a cod-fish, in the museum at Bremen, and published his generalization in a *Lecture on the Signification of the Bones of the Skull*. "As the brain," says he, "is a more voluminously developed spinal chord, so is the

brain-case a more voluminous spinal column." This idea has since been subjected to a sifting examination by various German, French, and British anatomists. Professor Owen, while adopting it so far, has considerably modified it. According to him the skull is not a separate column, but a series of vertebræ homologous to the series in the back-bone.

Proceeding onward from the neck we find the spinal chord becoming expanded in the brain into a globular mass, and we are according to this doctrine to regard the bony envelope which protects it as just a continuation of the series of vertebræ of the back-bone, these vertebræ being greatly modified to suit the end which they have now to serve. The skull, it is well known, is made up of parts which can be separated from each other, and these parts can be arranged in a series of segments, each of which contains the central cylinder, and the various processes which constitute the typical vertebra. Owen reckons the cranium as made up of parts corresponding to four vertebræ, but he does not seem to be sure whether there may not be other vertebræ in the cranium not fully developed. There are other anatomists who discover seven vertebræ in the skull, and perhaps this may be regarded as a proof that the doctrine, at least in some of its details, is not fully settled.

Proceeding on this method we have discovered the morphological signification of the back-bone, the tail, the ribs, and the skull itself. The question now comes to be started, what are we to understand by the limbs of animals? Professor Owen answers this in a deeply interesting and eminently suggestive Lecture on *Limbs*, delivered before a distinguished audience in February 1849, with all that grace of manner and elegance of language which, together with his learning and the comprehensiveness of his views, render him one of the most accomplished of living lecturers. In this lecture he shews that there are homologous segments appearing in the limbs of fishes, reptiles, birds, mammals, and man, though the limbs have to perform very different functions in each of these kinds of animal. He exhibits to us, first, the pectoral fin of the marine animal, the dugong; secondly, the fore-limbs of the mole; thirdly, the wing of the bat; fourthly, the leg of a horse; and, fifthly, the arm of man; and he shews how certain essential parts run through all these limbs, and maintain a uniform structure even when such different functions have to be performed as that of diving and swimming, burrowing and running, climbing and flying. It is a curious circumstance that every segment, and almost every bone present in the human hand and arm, exist also in the fin of the whale, though they do not seem required for the support and movements of that undivided and unflexible paddle. In many ani-

mals, indeed, some of the homologous parts, as for instance, certain of the fingers and toes, are not fully developed or are wanting, but in such cases they will often be found in a kind of rudimental state, or when absent we can tell what precise homologous parts are wanting, and what are present. The fore-leg of the horse wants the first and fifth finger, but has the second and fourth in an undeveloped state in the splint-bones, while the foot corresponds to the mid-finger, and the hoof is just the nail of that finger enlarged beyond the normal size.

Professor Owen next seeks to settle the higher question, what are we to understand by limbs in relation to General Homology? We cannot give his processes; we must content ourselves with giving his results. We have already said that in the vertebra, besides the central part and the apophyses running off from it, there might also, though not essential to the vertebra, be certain appendages. From the hæmal or lower arch of the vertebra in particular, certain appendages are found to proceed. Owen traces them in a rudimental state in various vertebræ of the animal frame, and after an extensive induction, he comes to the conclusion that the scapula is the hæmal arch, and the human hands and arms the diverging appendages of the hæmal arch, belonging to the lowest segment, the occipital segment of the skull. The hind-limbs are shewn by a similar process to be costal appendages of a pelvic vertebra. The whole skeleton, skull, back-bone, and limbs, including the whole vertebrate axis from the head to the tail, and all lateral parts, such as ribs and feet, are thus reduced to a unity, in a series of segments repeated in their essential characters, though infinitely diversified, to suit the particular purpose of the member.

We may state the conclusion in the words of Professor Owen:—"General anatomical science reveals the unity which pervades the diversity, and demonstrates the whole skeleton of man to be the harmonized sum of series of essentially similar segments, although each segment differs from the other, and all vary from the archetype."

"If," says Professor Sedgwick, in the fifth edition of his Discourse, in commenting on these speculations, "there be an archetype in the vertebrate division of animated nature, we may well ask whether there may not be a more general archetype that runs through the whole kingdom of the living world. In a certain sense there is. All animals, if we except the radiata, which come close to a vegetable type, are bilateral and symmetrical, have double organs of sense, and have a nervous and vascular system, with many parts in very near homology, even when we put side by side for comparison the animal forms taken from the opposite extreme of Nature's scale. And even in the

radiata, where we at first sight seem to lose all traces of the vertebrate type, on a better examination many of the genera are proved still to be bilateral and symmetrical."

These types appear not only throughout the whole series of animals, from the lowest to the highest, but throughout the whole Geological Series, from the earliest to the latest. It is now asserted that so long ago as the age when the old red sandstone was deposited in a district of what is now North America, there was a reptile who left the print of his foot in the sand, and this footprint turns up in the present day to shew that the animal had five toes. Coming down to the age of the new red sandstone, we have numerous footprints of reptiles, where again the five toes appear. In due time man appears, and is found too with five fingers on each hand, and five toes on each foot. Buckland tells us that in the "fore-paddle of the plesiosaurus, we have all the essential parts of the fore-leg of a quadruped, and even of a human arm; first the scapula, next the humerus, then the radius and ulna, succeeded by the bones of the carpus and metacarpus, and these followed by five fingers, each composed of a continuous series of phalanges. The hind-paddle also offers precisely the same analogies to the leg and foot of the mammalia; the pelvis and femur are succeeded by a tibia and fibula, which articulate with the bones of the tarsus and metatarsus, followed by the numerous phalanges of five long toes."

We cannot dwell on this part of the subject, but we must be permitted to say in passing, that the doctrine we are now expounding gives, if we do not mistake, the true meaning of such authenticated facts as the author of the *Vestiges of Creation* has woven into his plausible, yet withal exceedingly superficial work. But it gives no foundation whatever to the theory which he has reared on these facts, after having mingled with them many unauthenticated and mistaken statements. That there has been an order, and upon the whole a progression in the animal creation, should be admitted by all geologists. But it is an order, not in the nature of things, but in the plan of the Creator. It is not that one species has run into a higher by physical laws, but it is that the higher species is constructed after the same type as the lower.

He who maintains, that because there is a progression in the works of God, therefore the inferior has developed itself by natural law into the superior, is about as far-sighted and sagacious as the child who, on seeing a great number of vessels in a pottery, made all after nearly the same mould, but of different sizes, concluded that the large vessels had grown from the little ones. This progression is one of those collocations which John Stuart

Mill would call ultimate facts, that is, in physical investigation they are ultimate facts ; and if we wish to go farther, as we think we ought, we must trace them to the designing mind of the Creator. For there has been no authenticated instance of one species of animal being transmuted into another ; and there has been as perfect an induction, as physical science admits, in favour of the necessary separation of species and genera. We do not know of any law of nature which has been established on a larger or more invariable induction. He who would set it aside, on the pretence of explaining all things by natural law, must in the very act be setting aside natural law. The nameless author of "*The Vestiges*" should best know his own genealogy, and he may owe his insight into man's origin from the monad through the mollusc and mammal, to the circumstance of his having been himself generated in this manner ; but until he manfully discloses himself, and produces such a fact in favour of his transmutation theory, we must claim to ourselves a nobler, if not so "endless" a genealogy, and assert that man is the "son of Adam, which was the son of God." When he has convinced us of his theory, we shall expect, as the next product of natural law, to hear of one who has risen so far above his ancestors, begetting a son belonging to a species as far above the human species as man is above the brutes. But we may safely leave the author of "*The Vestiges*" in the hands of Mr. Hugh Miller and Professor Sedgwick.

If there be then such a prevalence of typical and archetypal forms, the question arises, what is the final cause of it ? Professor Owen does not seem to know what to make of the doctrine in this respect. He protests, indeed, that it cannot be employed to favour Atheism, but he does not seem to have a settled conception of its true religious signification. He is ever asserting that the facts of anatomy do not admit of an explanation on purely teleological principles ; and so far we agree with him, if by teleology a reference be meant solely to the wellbeing of the given animal. "I think it will be obvious that the principle of final adaptation fails to satisfy all the conditions of the problem. That every segment, and almost every bone, which is present in the human hand and arm, should exist in the fin of the whale, solely because it is assumed they were required in such number and collocation for the movement of that undivided and inflexible paddle, squares as little with our idea of the simplest mode of effecting the purpose, as the reason which might be assigned for the greater number of bones in the cranium of the chick, viz., to allow the safe compression of the brain-case during the act of extrusion, squares with the requirements of that act." (Lecture

on Limbs, p. 40.) And again, (Homologies, p. 73,) "The attempt to explain by the Cuvierian principles the facts of special homology on the hypothesis of the subserviency of the parts so determined to similar ends in different animals—to say that the same or answerable bones occur in them because they have to perform similar functions—involves many difficulties, and is opposed by numerous phenomena. We may admit that the multiplied points of ossification in the skull of the human foetus facilitate, and were designed to facilitate, child-birth; yet something more than such a final purpose lies beneath the fact, that most of those osseous centres represent permanently distinct bones in the cold-blooded vertebrates. The cranium of the bird, which is composed in the adult of a single bone, is ossified from the same number of points as in the human embryo, without the possibility of a similar purpose being subserved thereby in the extrication of the chick from the fractured egg-shell. The composite structure is repeated in the minute and prematurely born embryo of the marsupial quadrupeds. Moreover, in the bird and marsupial, as in the human subject, the different points of ossification have the same relative position and plan of arrangement as in the skull of the young crocodile, in which, as in most other reptiles, and in most fishes, the bones so commencing maintain throughout life their primitive distinctness. These, and a hundred such facts, force upon the contemplative anatomist the inadequacy of the teleological hypothesis."

While we admit all this, we do not think that he is justified in saying, "We feel the truth of Bacon's comparison of final causes to the vestal virgins, and feel that they would be barren and unproductive of the fruits we are labouring to attain, and would yield us no clue to the comprehension of that law of conformity of which we are in quest." His own favourite idea might, we think, have led the learned professor up from the *special* doctrine of final causes to a *general* doctrine. Just as there is an archetype or general plan in the structure of the skeleton, so there may be a general scheme of final causes to accomplish a higher end than the special adaptation. It is not difficult, as we conceive, to perceive the final cause of this grand homology of parts. While the special modifications, or adaptations, investigated so carefully by Cuvier, are intended to promote the well-being of the particular species of animal, the archetypal plan investigated by Owen is intended to make the animal comprehensible by the intelligent creation.

We are not willing, at this far advanced stage of our Article, to enter upon an analysis of the powers of the human mind, otherwise we could demonstrate that this general type is admirably suited to the nature of man's faculties. Man's original,

immediate, and fundamental knowledge is obtained, we believe, by sense-perception, self-consciousness, and other forms of intuition. Upon the materials thus furnished, the faculties of understanding operate in discovering relations between the objects which have become known by means of the faculties of direct intuition. And chief among these faculties, which perceive relations, is that of comparison, or of perceiving resemblances. We hold this to be the most useful of all the faculties of the understanding, whether for practical or scientific purposes. We see it actively operating in early life. The child is taught most effectively by signs and comparisons. In the simpler stages of society, mankind can be instructed in the knowledge of abstract truths only by symbols and parables. Hence we find most heathen religions becoming mythic, or explaining their mysteries by allegories or instructive incidents. Nay, God himself, knowing the nature of the creatures formed by him, has condescended, in the earlier revelations which he made of himself, to teach by symbol; and the greatest of all teachers taught the multitudes by parables. The great exemplar of the ancient philosophy, and the grand archetype of modern philosophy, were alike distinguished by their possessing this faculty in a high degree, and have both told us that man was best instructed by similitudes. "It is difficult," says the Guest in the *Statesmen* of Plato, "fully to exhibit greater things without the use of patterns," (*παρδειγματα*.) Lord Bacon, in more than one place, has expressed the sentiment, "As hieroglyphics preceded letters, so parables are older than arguments. And even now, if any one wishes to pour new light into any human intellect, and to do so expediently and pleasantly, he must proceed in the same way, and call in the assistance of parables."

Now, the homologies of nature are suited to this faculty in man, and it may be also to the same, or a similar but higher, faculty in the minds of higher intelligences. Without the repetition and correspondence of parts, man would have felt himself lost in the midst of God's works, and this because of their very profusion. It is by means of points of analogy that man is enabled practically to recognise, and scientifically to classify, the objects by which he is surrounded. The more obvious resemblances furnish us with our practical knowledge. It is by means of the more fixed points of resemblance that science is enabled to form its classifications. It is by the grand archetypes of nature that we are enabled to perceive unity in the midst of diversity, and dispose all the works of God into sublime groups. It is the prevalence of archetypal forms which imparts to nature its unchanging aspect, and gives us the stable in the midst of the unstable.

Plato seems to have pointed to these archetypes, and so to have bodied forth a great truth, without, however, perceiving its precise meaning, in his doctrine of ideas and patterns, (*ιδεαι και παραδειγματα.*) Not that we are willing to accept the doctrine as it seems to have been understood by Plato and stated by Aikenside :

“ There deep retired,
In his unfathomed essence viewed the forms—
The forms eternal of created things.”

It is quite true that these archetypes existed prior to the particular objects which are accommodated to them. But then they have no existence independent of God—they are the creation of God's intelligence, and are just the plan after which all things are formed. These archetypes proceed from intelligence, and are suited to intelligence. The prevalence of them throughout long geological ages, and possibly also throughout many different worlds, seems to shew that they are to be observed by various orders of intelligent beings. In this we have a sufficient final cause for the existence of these typical forms, and Owen has developed unconsciously a teleology of a higher and more archetypal order than Cuvier. It is just because such archetypes exist in nature that Owen has been enabled to group the whole vertebrate race of animals into one grand system.

The time has now come, we think, when Natural Theology should admit that there is more in nature than a mere adaptation of means to serve an immediate object. It will not lose, but rather gain by this, inasmuch as it will thereby be furnished with a new argument, and that of a different genus from that derived from the mere adaptation of parts, in favour of the existence of a Divine intelligence. The prevalence of model forms shews that all things are after a predetermined pattern. We are farther inclined to think that this new doctrine just rising into sight, while it is fitted to give us a more profound view of the intelligence displayed in creation, also furnishes a new analogy between natural and revealed religion. Revealed religion has long been known to possess a typical system. Many in these later days have, we fear, been entertaining a suspicion of the whole typical system of the Word of God,—it has appeared to them so visionary; and this suspicion has been confirmed by the indiscriminate way in which the types have often been treated. Possibly some may be more reconciled to the Scripture system when they are led to discover an analogous system pervading the works of God. We think, too, that a comparison of the principles involved in both systems might enable us to

construct a philosophical, that is, an enlarged system of Scripture Typology.

By types we are not to understand mere prefigurations of a certain greater form, but certain forms all after one great model. A type in this sense may point to an archetype, but does not imply an antitype. It is in this enlarged sense of type and archetype that the words types and figures are used in the Scriptures. We are, in closing this Article, to trace the appearance and re-appearance of like forms throughout the supernatural dispensations of God. This prevalence of typical forms in the supernatural as in the natural economies is addressed to the principles of man's mind. We can conceive no other system furnishing such unity amid diversity, and such means of raising men's minds to the comprehension of grand and sublime truths.

It strikes us that the typical system runs through the whole Divine economy revealed in the Word. First, Adam is the type of man. He and his posterity are all of the same essential nature, possessing similar powers of intuition and understanding, of will and emotion, of conscience and free agency, and God acts towards them in the dispensations of grace as in the dispensations of nature, as being one. Then, from the time of the Fall, we have two different typical forms—the one after the seed of the serpent, the other after the seed of the woman. Henceforth there is a contest between the serpent and Him who is to destroy the power of the serpent, between the flesh and the Spirit, between the Church and the world. Two manner of people are now seen struggling in the womb of time—a Cain and an Abel, an Ishmael and an Isaac, an Esau and a Jacob, an Absalom and a Solomon—the older born after the flesh, and the younger born after the spirit. It is this, fully as much as even the harmony of its doctrines, which gives a unity to our religion in all ages, which enables the Christian to profit to this day by the teaching of the Old Testament, to sing to this day the song of Moses and the psalms of David, and to perceive and feel that there are the same contests now as then, the same contests in the heart, the same contests in the world, between the evil and the good principle, between the first or nature-born, and the second or grace-born. In short, there are now as there have ever been, but two men on our earth, typical, federal, or representative; the first man which is Adam, and the second man which is Christ. “And so it is written, The first man Adam was made a living soul, the last Adam was made a quickening spirit. Howbeit that was not first which is spiritual, but that which is natural; and afterward that which is spiritual. The first man is of the earth, earthy; the second man is the Lord from heaven.”

Had our limits permitted, we might have shewn that there

appear from age to age certain great leading powers of the first or earthly form, distinguished for their boldness and the oppression which they exercise over the Church, such as Cain and Lamech, Ham and Nimrod, Egypt and Babylon. "They have consulted together with one consent: they are confederate against thee; the tabernacles of Edom and the Ishmaelites, of Moab and the Hagarenes, Gebal and Ammon and Amalek, with the inhabitants of Tyre; Assur also is joined with them; they have holpen the children of Lot." These are represented in Christian times by Gog and Magog and Babylon. But we must confine ourselves to the figures of the better type which appear and re-appear throughout successive ages.

The Old Testament types may be divided into three classes, typical ordinances, personages, and events. *First*, there is a number of ordinances, all more or less of the same general mould, all imparting substantially the same instruction, all pointing to guilt contracted, to God offended, to a propitiation provided, and to acceptance secured through this propitiation,—the four great cardinal truths of revealed religion as addressed to fallen man. There were sacrifices in which the offerer, placing his hand on the head of the animal, and devoting it to destruction in his room and stead, expressed symbolically his belief in these great saving truths. There was the tabernacle, with its people worshipping outside, and the shechinah which had to be sprinkled with blood in its innermost recesses, pointing to an offended God, but a God who was to be propitiated through the shedding of blood. *Secondly*, there were typical persons, such as Abel and Enoch, Noah and Abraham, Moses and Joshua, Samuel and David, Elijah and Elisha, shadowing the prophetic, priestly, and kingly offices of Christ. From the fall downward, there is a succession of personages with their individual differences, but all after a predetermined model, exhibiting certain features of character in as marked a manner as the Jewish race shews certain features of countenance. Then there are, *thirdly*, certain typical events exhibiting the same truths in a still more impressive form. There is the flood in which many perish, but a few—that is, eight—souls are saved in an ark symbolical of Christ. There is the destruction of Sodom, in which the inhabitants of the city perish, while Lot and his family are rescued by heavenly interposition. Most instructive of all, and therefore occupying the most important place, there is the deliverance from Egypt. The state of the Hebrews as bondmen, the deliverer raised up, the method of the deliverance in the midst of judgments, the deliverance itself and the wonderful journey to Canaan, with the provision made for the sustenance of the people, are as certainly anticipations of

a higher redemption as the fish and reptile's limbs are an anticipation of those of man. It is all true history, and yet it looks as if it were a parable written by some man of God for our instruction. We are trained in the training of the children of Israel, and by means of this discipline through which they were put, our representative faculty has supplied us with some of our clearest and liveliest, our most profound and comforting notions of the plan of redemption.

In all these we may observe the same two general truths, the principle of general homology with the principle of specific adaptation. These typical ordinances, persons, and events, are all after the same general plan, and exhibit the truths which the sinner most requires to know, and especially the person and work of the expected ONE, under interesting and instructive aspects. But they were all at the same time adapted with exquisite skill to the age and to the circumstances of which they formed a part. The ordinances, for instance, were appropriate worship on the part of those who were required to observe them, and in some cases subserved certain national and civil purposes. The persons who figure as types, were all the while doing a work for their own day, and were in most cases, we believe, unconscious that they bore a representative character. The events, too, were in most cases important links in the chain of Providence. But, just as the paddle of the whale serves its special purpose, but contains divisions not needful to its special purpose; just as the chick's head contains typical bones not needed in order to its extrusion from the egg—so the Old Testament ordinances, personages, and events, have an additional importance given them by their prefigurative character. Like the different species in the vegetable and animal kingdoms; like the same organs in the different species—they diverge on either side in order to suit a special purpose, but still they all retain a predetermined pattern. In human architecture, the portico, and the passage leading from it, have commonly a homology to the temple itself. It is the same in the temple of God. The gateway, and the pillars and the avenues of approach, are all after the same outline as the temple to which they form an entrance.

But we cannot dwell on these Old Testament types; we must refer for the farther discussion of them to the able and learned work of Mr. Fairbairn, on the *Typology of Scripture*. In referring to this treatise, it would be entirely out of place to offer any analysis of a work which has been for some years in the hands of the public, and which has already taken its place among our standard theological literature. It is saying but little of it, to affirm that it is the best book with which we are acquainted on the subject of typology; for we know of no other work in which

the topic is treated in a manner at once evangelical and judicious, with learning, and yet with soundness in the faith. In the first volume the author clears the ground, enunciates his definitions, explains his principles, and presents a pretty full discussion of the Patriarchal period. In the second volume he treats of the Mosaic period, and develops his view of the true signification of the Exodus from Egypt, and the Law as delivered from Sinai.

We like, particularly, the opening chapters, in which the learned author lays down his principles, which seem to us in many respects original, and generally judicious. His orbit and ours do not lie exactly in the same plane, and there are one or two points at which we might cross each other, but, upon the whole, we very much coincide both with his principles and the application which he has made of them.

“If we inquire concerning these resemblances, of what kind or nature they behoved to be, and actually were, a very little reflection must convince us, that they must somehow have exhibited the same great elements of truth with the things they represented, and that too in a form more level to the comprehension, more easily and distinctly cognizable by the minds of men. There must have been, first of all, the same great elements of truth,—for the mind of God and the circumstances of the fallen creature are substantially the same at all times. What the spiritual necessities of men now are, they have been from the time that sin entered into the world. Hence the truth revealed by God to meet these necessities, however varying from time to time in the precise amount of its communications, and however as to the hue and form in which it might be presented, must have been, so far as disclosed, essentially one in every age. . . . But then, as the full-grown man, when pursuing the tenor of his way through the perplexing snares and busy avocations, reaps every day the benefit of his early culture, so, doubtless, it was the intention of God that the measures adopted with the ancient Church should not only minister to the growing light and comfort of its own members, but also furnish materials of consolation, guidance, and improvement to the Church of the New Testament.”

But to return to our own theme, for it will be observed that while Mr. Fairbairn treats of types in the theological sense, or of prefigurations of Christ, we treat of types in the larger, and, we believe, scriptural sense, as model or pattern figures. (*Τύποι καὶ ὑποδείγματα*; see 1 Cor. x. 6; Phil. iii. 17; 1 Peter v. 3.) Under the Old Testament the shadow becomes more and more defined as the substance draws nigh, till in the later prophets we have a complete anticipation. The figure, indeed, as presented in the first prediction, is as large as it ever is afterwards, but its lines come out more and more distinctly as we approach

the fulness of time. The doctrine which we are expounding, be it observed, is not the vulgar one of type and antitype, but that of typical forms, serving most important purposes in the age in which they appear; but, at the same time, epitomes of an archetype to appear. When the archetype appears, what had been seen before merely as shadow, now comes forth clearly. The older saints had merely the shadow—but we, with open face, looking into the New Testament as into a glass, see the very image, (Heb. x. 1; 2 Cor. iii. 18.) In the scene on Calvary, in particular, we have the truths which the sinner is most concerned to know, of sin and salvation, of God offended, and God pacified, set forth in the most awfully, and yet most winningly, impressive manner.

Nor does the scheme of types, as now explained, cease on the appearance of Christ. We still live under a system of types. Just as all the figures in the Old Testament look forward to him who is the principal figure, so do the figures in the New Testament look back to him. But there is this difference between the former and the latter types, that the latter, as becometh the dispensation, are not so much outward and ceremonial as inward and spiritual. The miracles wrought by Christ in person, when on the earth, are typical of the supernatural power which he is exercising by his Spirit; the healing of diseases is representative of his power to cure spiritual maladies. There is a close mystical union between him and each of his people—he and they are said to be one. They are one in respect of their human nature. “It behoved him to be made like unto his brethren; and forasmuch as the children are partakers of flesh and blood, he also likewise took part of the same,” and “took on him not the nature of angels but the seed of Abraham.” Then he is their surety and representative, and they are reckoned as righteous in him. He stood in their place guilty, “stricken, smitten of God,” and they stand in his room accepted, righteous. He has become, too, “the head of the body, the Church,” “the beginning, the first-born from the dead,” and “has in all things the pre-eminence and is the first-born among many brethren.” They are priests under him as chief-priest, kings under him as sovereign. By his appointment they are “predestinated to be conformed to his image.” The Godhead once more issues the decree in reference to this man and that man, “let us make man in our image after our likeness;” “so God creates man in his own image, in the likeness of God creates he him.” In the performance of this work they are “crucified together with him,” “dead with him,” “buried with him,” and as they die with him, so they “rise with him,” and “reign with him.” In this household there are many children, and there are differences between

them of gift and taste to suit them for the different employments to be allotted to them ; but still, we may discern in them all a family likeness, for they are all begotten of God. In this perfect system of types the whole has a representative in every part, and every part is a symbol of the whole. Each living stone in this temple is carved after the similitude of the whole temple. Each leaf, each branch of this tree of life is an image of the whole tree. The Church is his body, and every member in particular is after the pattern of the whole body.

When objects become far removed from us, we must be on our guard against taking clouds for realities, but we think we see some real truths—lying we grant—on the very horizon of our vision. All animal bodies, as we have seen, point to man as the top of the earthly hierarchy. Professor Owen tells us that “all the parts and organs of man had been sketched out in anticipation, so to speak, in the inferior animals;” and that “the recognition of an ideal exemplar in the vertebrated animals proves that the knowledge of such a being as man must have existed before man appeared. For the Divine mind which planned the archetype, also foreknew all its modifications. The archetypal idea was manifested in the flesh long prior to the existence of those animal species that actually exemplify it. To what natural laws or secondary causes the orderly succession and progression of such organic phenomena may have been committed, we as yet are ignorant. But if, without derogation of the Divine power, we may conceive the existence of such ministers, and personify them by the term ‘Nature,’ we learn from the past history of our globe, that she has advanced with slow and stately steps, guided by the archetypal light amidst the wreck of worlds, from the first embodiment of the vertebrate idea under its old ichthyic vestment, until it became arrayed in the glorious garb of the human form.”

But may not this highest form on earth point to a still higher form? Man’s body on earth may be but a prefiguration of his body in heaven. “But some will say, how are the dead raised up, and with what body do they come?” The Apostle does not give a direct answer to this question, but he points to certain analogies which shew that though the body will preserve its identity, it will be changed to a nobler form, as the seed is changed when it becomes grain. “It is sown a natural body, it is raised a spiritual body; for there is a natural body and a spiritual body, and we read of bodies terrestrial and of bodies celestial.” In heaven then our bodies are to be after a higher model, “spiritual” and “celestial.” It doth not, indeed, appear what we shall be, but when He appears we shall be like Him, and our bodies fashioned after his spiritual body, which we may

believe to be the most sublimated form of matter—and modern science, while it cannot efface the distinction between mind and matter, is every day enlarging our conceptions of the capacities of matter. Thus the simplest organism, points by its structure upwards to man, and man's earthly frame points to his heavenly frame, and his heavenly frame points to Christ's glorious body, and we see that all animated things on earth point onward to His glorified humanity as the Grand Archetype of all that has life.

Professor Owen has another idea. He supposes that in other worlds, as there are the same laws of light and gravitation as on our earth, there may be also a similar organic structure. "And the inference as to the possibility of the vertebrate type being the basis of the organization of some of the inhabitants of other planets, will not appear so hazardous, when it is remembered that the orbits or protective cavities of the eyes of the vertebrata of this planet are constructed of modified vertebræ. Our thoughts are free to soar as far as any legitimate analogy may seem to guide them rightly in the boundless ocean of unknown truth. But if censure be merited for here indulging, even for a moment, in pure speculation, it may, perhaps, be disarmed by the reflection that the discovery of the vertebrate archetype could not fail to suggest to the anatomist many possible modifications of it beyond those that we know to have been realized in this little orb of ours."

If there be any truth in this idea, then the animated matter of other worlds may point to the same Archetype as the animated matter of this world. And on this supposition what a significance would be given to the humanity of Christ. When the Word became flesh, the Divinity was in a sense humbled; and when the Incarnate Word ascended into heaven, flesh or matter was exalted and made to serve the highest purposes. We thus obtain a glimpse of a way in which matter throughout all its domains may be exalted by its association with the Son of God taking our likeness; and of a way, too, in which other worlds or all worlds, and other creatures, even principalities and powers in heavenly places, may be instructed by this "manifold wisdom," and by which God may "by him reconcile all things unto himself; by him, I say, whether they be things in earth or things in heaven."

But as we stand gazing on our ascending Lord, a cloud wraps him from our view, and we hear as it were a voice, saying, "Why stand ye here gazing?" and bidding us return to the observation of objects on the earth clearly within the range of our vision.

- ART. V.—1. *Mary Barton: a Tale of Manchester Life.* 2 vols. London, 1849.
2. *Passages in the Life of Mrs. Margaret Maitland of Sunnyside.* Written by Herself. 3 vols. London, 1850.
3. *Merkland.* By the Author of “Mrs Margaret Maitland.” 3 vols. London, 1851.
4. *The Initials: a Story of Modern Life.* 3 vols. London, 1850.
5. *The Ogilvies: a Novel.* 3 vols. London, 1849.
6. *Olive: a Novel.* By the Author of “The Ogilvies.” 3 vols. London, 1850.
7. *The Ladder of Gold: an English Story.* By ROBERT BELL. 3 vols. London, 1851.
8. *Caleb Field: a Tale of the Puritans.* By the Author of “Passages in the Life of Mrs. Margaret Maitland.” London, 1851.
9. *Rose Douglas; or, Sketches of a Country Parish: being the Autobiography of a Scotch Minister's Daughter.* By G. R. W. 2 vols. London, 1851.

SENTIMENTAL is a word continually on the lips of those—and they are a not very small class in the reading world—who object to works of Fiction altogether, and consider time given to their perusal absolutely wasted. But the word is sufficiently vague and indefinite in popular use. Granted, that there is a something faulty, which we seek to denote by the term, it may be worth while to endeavour to define the accusation, before considering whether the works in question are bound to plead guilty to it, or not. Sentimentality is not simply an excess of passionate feeling, for its chief characteristic is feebleness rather than strength of any kind. It is not hypocrisy; nobody would dream of confounding the two, a vice and a foible. Nor is it that more mitigated form of deceit which we call affectation, for the habit of mind intended is not of necessity one consciously assumed; more generally it exists as a sort of reality, however weak and colourless, in the character: a really sentimental person and one that only wishes to be thought so, are not the same. On the whole, difficult as it is to seize the precise meaning of “winged words,” it would perhaps be tolerably near the mark to say, that sentimentality is not merely an exaggeration of feeling, unregulated by reason, and ludicrously incommensurate with the triviality of its object; but, further—and this is an essential part of it—that it is an indulgence of feeling for feeling's sake; that it lives in the atmosphere of fancy, and collapses instantaneously, if brought into contact with the actual; in a word,

that it is a caricature of really strong deep feeling. For example, the jealousy of Othello, founded though it be on trifles, is not sentimental; for the emotion penetrates his whole nature, it absorbs him—*it necessitates action*. On the other hand, for an instance of what is really sentimental, no one can be at a loss who has ever read a page of Sterne.

Now, it is scarcely fair, we think, nor reasonable, to connect this fault with novels in general. It is true that there have been many, and still are some, sentimental novels in the literature of Great Britain. Is this cause for tabooing those that are not? It will not be denied by any one conversant with the subject, that there has been a great improvement of late in this respect. Novels, as is natural, have kept pace with the poetry of the day. Sometimes, however, the objection takes a wider aim. Everything, it has been urged—among others by an able living writer*—everything that excites the feelings, without affording them the natural relief of action, tends to chill and harden them into callousness. This objection, in consistency, would exclude all fiction—poetry as well as novels; it would banish all appeals to highly wrought feeling, except such as address themselves to some result in hand; it would involve some such proscription of all not-scientific literature as Plato is accused of having contemplated. But the principle may be accepted in its full force, without disparagement to poetry in any shape, even in that of three volume novels. For it is in the power of every reader to apply the remedy, or rather the preventives for himself. The book has done its part if it has suggested the train of thought and emotion: it remains only to carry this impulse into the living sphere of action; opportunities cannot fail to present themselves for giving it free play. The circumstances in the fiction may have been ever so dissimilar to those that shall occur; but the impulse has been given; and the real identity, which lies at the bottom of human life, and human nature, will reconcile the disparity. It is only an undue quantity of novel reading that will cry “Wolf” so often as to blunt the natural tendency to energize. When it has been conceded that works of fiction are too apt by their fascination to encroach on graver hours, and to leave a distaste for graver studies, we have allowed all that can justly be alleged against clever truthful novels, which help to unriddle the mystery of life.

The novel may be regarded as a species of poem, at least in one aspect. But perhaps it would be more accurate to regard it as what Coleridge would call the synthesis of history and poetry; if we comprehend under the former head not “history proper” only, but the history of individuals, commonly called

* Rev. J. H. Newman.

biography. The novel is an idealized form of history. And, if the eye be indeed that of a philosopher, and the hand gifted with the painter's skill, it is scarcely a paradox to say that the novelist is not without his advantages in the great art of teaching by examples. If truth is at times more strange than fiction, fiction is at times more true than truth. As history, real living history, gives a more faithful representation than the most elaborately minute annals; as the daguerreotype is less true than a portrait by Richmond; as a landscape by Claude or in Tennyson is instinctively felt to be true, though it may be not literally accurate; as correct perspective always implies a violation of details; or, to pass from imitation to realities—as the expression of the human face far rather than its component features makes it identity;* as the spirit of a law is above its letter in importance; so a really first-rate novel is no unworthy rival of the dignity of history. We do not mean merely that historic novels like *Ivanhoe* or *Quentin Durward*, (Scott by the way is proverbially inexact in antiquarian details,) or like a very recent *History of England*—Mr. Macaulay must pardon our classification—are ancillary in no slight degree to the less interesting fac-similes of times gone by, more easily apprehended, less easily forgotten; nay, that they are more true in proportion, grouping, tone; but, beyond and besides all this, that, in the peculiar province of the novel, the study of character, the creations of a truthful imagination will convey a longer, fuller, more complete truth, than any fragmentary specimens of humanity can, however carefully extracted from the world of fact.

Very rare, however, it must be confessed, are those who may safely venture thus to idealize: novelists of sufficient calibre, we might almost be told, are themselves ideal. Certainly it would not be easy to cite a large number. Consider only how many fitnesses ought to meet in the novelist. History is allowed to be one of the most comprehensive and many-sided studies. Novel-writing is even more emphatically so. Poetry and ethics are its very life blood; (physics, metaphysics, politics, and polemics, we beg to demur against;) manners, scenery, costume, physiognomy, are some of its materials; the beautiful in every art, in every aspect of nature, it must be capable of recognising; like the greatest poet of Ancient Greece, it is half epic, half dramatic;

* "I mean to say, that the face of any one, to whom we are strongly and tenderly attached—that face which is enshrined in our heart of hearts, and which comes to us in dreams, long after it has mouldered in the grave—that face is not the exact mechanical countenance of the person beloved, nor the countenance that we ever actually beheld, but its abstract, its idealization, or rather its realization; the spirit of the countenance, its essence and its life. And the finer the character, and the more varied the intellectual powers, the more must this true *εἰδωλον* differ from the most faithful likeness that a painter or a sculptor can produce."—*Southey*.

it has its tragedy and comedy; lastly, and especially, it requires its own wondrous faculty of story-making, of weaving a web of adventures, the most artfully complicated evolutions of which shall never seem to outstep the modesty of nature. A great deal is wanted to become a Scott or a Lytton Bulwer, a Currer Bell, a Thackeray, or a Dickens; not a little to write "*Pride and Prejudice*," or "*Ellen Middleton*."

Without attempting in these limits to classify the novels of this and former times, one broad difference is too obvious to be passed over in silence between those of to-day and those of even thirty years ago. It is a change analogous to what we have witnessed in theology, philosophy, poetry, and politics. The recent novels, with a purer moral atmosphere, search much deeper into human nature; they partake more of autobiography. Few readers now have patience for the long-winded "*Annals*" of Sir Charles Grandison, or even of *Camilla*. The more pointed pages of Fielding and Smollett are interdicted, from a common sense of their indelicacy. The modern appetite scarcely goes back beyond the epoch of Sir Walter Scott. We are not bold enough to attempt to thrust Sir Walter from the throne which he occupies by well-nigh universal consent; although it could scarcely be called hypercritical to protest against the usually stilted movement of his dialogues. He is indeed the Wizard of the North,—great in pictorial passages and eloquent sentiments; unrivalled in the nice balance of character and incident, in exquisite harmony of plot; but, in every respect except the last, Scott has been nearly approached by one, the Scott of the present day, who surpasses him in depth of passion, in grandeur and sublimity of thought. For lofty conception of character, developed in all its heroic unity, there are few creations like *Rienzi*, *Zanoni*, and *Harold*; few more brilliant descriptions than the animated scenes of the *Last of the Barons*, with its almost dazzling variety of personages, passing in busy motion before the eye; few more boldly chiselled groups than those that stand in the contending shade of *Night and Morning*. That the author of such works should be too artificial in plot; too fond of "startling situations," as the French call them; too antithetical in his arrangements; often mystic; at times even vulgarly bombastic,—must be set down, we suppose, as one of the imperfections which mankind is heir to.

There is a style, the opposite of that of Scott and Bulwer. Independent of incessant excitement from the ups and downs of life, it devotes itself to the workings of the heart. The most notable example of this school is, of course, the "*strong minded*" *Jane Eyre*. And if no question be raised of the morale, and if an undue reliance on self, unamiable, it appears to us, if not

positively irreligious in such a degree, can be excused, if allowance be made for a worse than unfeminine coarseness of diction and even of sentiment, *Jane Eyre* with its more pleasing though less clever sister stands at the head of this category, for their searching revelations of nature and deep vein of poetry. Less unique in its beauties, but far more delicate and refined in tone, Lady Georgiana Fullarton's novels claim a very high place. In both *Ellen Middleton* and *Grantley Manor* the characters introduced are few, but finely traced and exquisitely shaded; the plot very simple, but profoundly interesting; both abound with intense feeling, often passionate, but at the same time elevating and pure; both are thoroughly imbued with a reverential love for all that is noble and beautiful, in the visible as well as in the moral world; in both the language is very fine.

A third species there is, analogous to the Comedy of the Drama; represented of old by Fielding and Smollett, and carried now to something like culmination by Mr. Thackeray and Mr. Dickens. The latter, inasmuch as he gives his readers more story, stands less removed from the common idea of a novelist. But, even in him, the interesting is almost secondary to the amusing; scenes rich in the ridiculous atone for too great intricacy of plot, and other infringements on the laws of nature. It would be hard to say which is the more popular. Perhaps a comparison would turn on the general question, Whether ideal or actual comedy is best? and, perhaps, that is a matter of taste. Some readers will prefer to revel in the pure humour of *Pickwick* or *Dombey*; others will find a more intellectual zest in the humorous wit, if we may combine two notions generally contradistinguished, which flavours the sparkling pages of *Vanity Fair*. For ourselves, we confess a leaning to the side of the great satirist. Grateful, as we cannot but feel, to Mr. Dickens for many a laugh, for many high and generous thoughts, and above all, for the beautiful images of childhood, which hallow his scenes with their fresh and loveable innocence; for the quaintness of Little Paul, the graceful guilelessness of David Copperfield, the winsomeness of his child-wife; still we relish even more the careless and inimitable graces of his compeer; the even stream of pleasantries, inexhaustible, and, we had almost said spontaneous, so little effort does it betray in the writer, so unfatiguing to the reader is it; the unmistakable fidelity of every, even the lightest touch; the pensive pathos lurking under the merciless castigation of the vices and sillinesses of the world,—who would ever be tired of these? If there be a tinge of Cynicism, it is as of one who pities, not hates, the undeniable follies around him. Iconoclast of spurious “gentility,” resolute to strip pretence of its disguise, he never fails to yield homage to all that is truly noble; he loves even to say a good word for the

gentle dulness which the world holds in contempt. He appreciates fully the distinctions of birth and money as necessary to our life in this world, but loves to remind us, that they are nothing more. Let Thackeray and Dickens continue to hold their divided sovereignty. Let their readers correct the optimism and rather indiscriminate benevolence of the latter by the darker view, which regards society as too apt to degenerate into what Carlyle has called it, "an armed neutrality, or, at best, a hollow commercial league." And let us all be thankful, that writers who exercise so great a power use it on the whole so well ; that the prurient ribaldry of past days is now a thing gone by ; that vice and folly are rightly selected as the proper butts for ridicule. In the same sort of style, Gilbert Gurney and Jack Brag, Peter Simple and Midshipman Easy, claim mention, but, in every respect, in a much lower place. Miss Austin's characters, "to sense and nature true," as they have described, would please our taste more, if they were in the habit of talking more naturally and easily—more like those of Miss Martineau for example.

Having thus paused to pay a passing tribute to some former productions in this department, we must proceed to our more immediate duty, of introducing some of the most recent notabilities ; premising that, as it is confessedly hopeless to attempt to convey an adequate idea of most books, and especially of novels, by extracts, and as a sketch of the story, however summary, is apt to detract from the pleasure of reading afterwards, we shall content ourselves almost entirely with such occasional comments as our space admits.

The authoress, for there is internal evidence of a lady's pen, of "Mary Barton, a tale of Manchester Life," has chosen a good subject, and has not done injustice to it. Not that it is a new topic with novel writers. The great problem of the condition of the poor, with reference too to this very locality, has often of late found a graphic and popular expression in this way ; with more formal display of political economy, and possibly with more scenic effect, but seldom with so much appearance of truth and nature. Most readers will think the book all the pleasanter for being dogmatic, not controversial ; for its indirect, unconscious mode of teaching through the medium of facts, in preference to long-winded interruptions to the plot, in the shape of didactic dialogues. Indeed, it does not profess to lecture on the vexed questions of the art politic. To describe some of the anxieties with which the artisans of Lancashire have to struggle in their battle of life ; and especially to give voice to "the bitter complaints," whether well founded or not, made by them of the neglect which they experience from the prosperous, especially from the masters whose fortunes they have helped to build up ; "to give

some utterance to the agony, which from time to time convulses this dumb people ; the agony of suffering without the sympathy of the happy, or of erroneously believing that such is the case,"—this is the moral purpose announced in the preface. And this principle is consistently observed. There is no inculcation or suggestion of Socialism or Communism in any political significance of the words. Mutual duties are prominently recognised in the relations of master and men ; faults on both sides are allowed in the unhappy occurrence of a strike for wages ; but there is no oracular dijudication in exact balance of rights and wrongs. On the whole, its readers will gather an impression, we think, and that a tolerably decided one, that there is only too much foundation for the old complaint, that the employed are regarded rather as hands than as brother men, with souls that should not die ; or at least, (and this seems a deeply rooted conviction in the mind of our authoress,) that sufficient care is by no means taken to prevent the estrangement arising from apparent indifference. Nor would it be easy to refuse assent to the earnest warnings of one, evidently familiar with the places and persons in question ; tenderly alive to the hopes and fears, the joys and sorrows of the poor, but preserved by calm common-sense and modesty of judgment from sentimentality or fanaticism.

The peculiar charm of "*Mary Barton*" is its extreme naturalness, not, however, without sufficient elevation of tone and sentiment to raise its lifelike delineations above the level of mere Dutch painting. The poor are not sublimated into models of heroic excellence. There is, on the contrary, a beautiful mixture of vulgarity and delicacy, of wisdom and short-sightedness, of noble feeling and narrow contracted prejudices.

Even the heroine has not suffered, in this respect, from any unfair partiality. Mary, the daughter of one mechanic, and the wooed of another, is indeed a lady, one of those to whom nature has given their patent of nobility, for the authoress knows well that grace and beauty are not found only in gilt frames. Mary is endowed with that inexpressible grace, delicacy, and innate refinement, which accompanies a tender, unselfish, loving disposition, even among those who are jostled day by day against the rugged realities of work and penury. Withal, she is not too faultless morally ; in fact, the tragic interest of the story arises partly from a little coquetry on her part, not altogether unpardonable under the circumstances. One beautiful trait, in particular, of the poor, not perhaps generally appreciated, is very conspicuous—their charity to one another ; the ungrudging bestowal of time and trouble, of scanty resources, and rich sympathy on the part of those who are themselves not very far removed above the danger of starvation, if they discover a depth of misery

deeper still. Our readers need not be alarmed at the prospect of penetrating the recesses of Manchester. The king's daughter, washing the linen of the Phæacian palace, is scarcely more unsuggestive of anything like vulgarity, than are these descriptions of life in the crowded dirty alleys of the land of smoke. The deep pathos of the "short and simple annals of the poor" has often been acknowledged; but in these pages it is brought home to the reader with an especial force, not so much as if he were examining curious exotic specimens of the ways and habits of a foreign nation, but so that he cannot choose but identify his own life with that of beings similarly constituted to himself. These homely details, in which we conceive the principal merit of the tale to lie, are dispersed of course throughout it, in too intimate a connexion with the tenor of it to be extracted without great disadvantage. We beg to assure our readers, that if they have any liking for the poetry of common life, they will be gratified here. It is not every one that sees it through the disguise of conventionalities, and feels its wide human import without being betrayed into maudlin extravagance.

It is obvious how abundant the materials are for contriving an interesting story in the present aspect of Lancashire. Where in England are there more striking contrasts? The bold and irregular features of the country, not entirely lost amid huge workshops and swarming streets; the acuteness and scientific knowledge of the modern artisan engrafted on the rugged, hearty character of the northmen; the old Teutonic dialect and primeval customs transplanted from the sequestered vales of Westmoreland, and lingering still in their new ungenial soil; above all, the fond recollections of country life, faithfully cherished, though "pent up in populous town," and lulling the aged to their last sleep in a happy dream of childhood and green fields,—of all these pregnant associations use has been made. The plot is interesting, though rather too deliberate in its movements; the fortunes of Mary and her faithful lover being closely interwoven with the sufferings of the masses in the bad time. The characters are distinct, and the conversations easy and racy, with words of wisdom scattered throughout—*e.g.*, "An anxious heart is never a holy heart,"—not a little quaint dry humour withal. Only one passage occurs to our memory open to the charge of having a bad tendency; it is where Job Legh, a philosophical old weaver, a very worthy old man, makes a remark incidentally, to the effect that it is quite sufficient to thank the Deity at odd times by an inward ejaculation, without any express use of prayer or praise—a passage scarcely consistent with the otherwise religious temper of the book. Regarding it as a whole, we sincerely thank the authoress for a public

benefit of no slight value. It is by such temperate yet kindly advocacy, rather than by frothy declamation, that the just claims of the poor are most likely to be enforced to some purpose. We know that some will exclaim, "True, poverty is a hard lot; but then the poor are used to it." And so, generally speaking, they are, and unconsciously acquiesce in the gradations of rank, not without, strange as it sounds, a sort of reflex pride in their superiors. And it is only in extreme cases of apparent hopelessness that they are possessed with a frantic craving for equality. But sympathy and courtesy they do desire; and we feel convinced that "Mary Barton" tends to rouse its readers to a sense of this necessity, and to remind them that even in the smallest matters of daily intercourse, an impression may be left which must tend either to swell the list of grievances in the muttered chorus of revolution, or to cement the "two nations" securely into one. Our comments on the work have occupied space into which we should gladly have introduced some extracts illustrative of a book which, however, is, we hope, already familiar to many of our readers.

When we say, that in reading "Passages from the Life of Mrs. Margaret Maitland" we have been considerably reminded of a "Diary of Mistress Mary Milton," which appeared in one of the magazines* last summer, and has since been published, we believe, in a separate form, we intend no small praise. Both are remarkable for a singular charm of latent poetry and *naïveté*, to say nothing of the less uncommon beauties of quiet and simple pathos. In both the story glides through troubles and tribulations into a quiet haven of rest at last; in both the substance is too genuine to proceed from anything but experience of the heart, veiled though it be under an assumed style, and embodied in imagined characters; and in both books these fictitious exponents, as we must take the liberty of supposing them, are exactly adapted for the purpose. Mrs. Maitland's autobiography is a very complete work. Greater variety of characters, scenes of more effect, might have been introduced; but they would mar, we suspect, the unity of the whole. A graver deficiency, perhaps, is the absence of warm, rich colouring, to borrow an illustration from a sister-art—the same poverty and tameness in this respect which moderates the admiration of connoisseurs for Overbeck and Scheffer; but even this, perhaps, is better as it is. The thread on which the narrative is strung is the peaceful, uneventful autobiography of an old maiden lady who has known the unhappiness of an ill-starred attachment in her own youth, and has learned to live in the life of others, and in their anxieties to forget her own. Not that these past sorrows are

* Sharpe's London Magazine.

more than distantly alluded to. Time is a great physician, at least with docile patients,

“ And gently blows the wind to those
That are cast in a gentle mould.”

The same probations, that would leave rebellious and selfish spirits soured for life, appear only to have opened yet more widely the kindly temperament of Mrs. Margaret Maitland. She is naturally fond of young people—the “bit bairns,” as she calls them—herself carrying about with her in old age the perpetual spring of youth, its fresh and hopeful elasticity. And where can they find a better confidante than Aunt Margaret? Accordingly, a better view-point than her cottage at Sunnyside for watching the vicissitudes of the little world around it cannot well be conceived.

The outlines of the story are soon given. It is an evidence, like “Olive,” of the real dignity and happiness of an old maid’s life, if it be viewed aright. Of course the even tenor of the good lady’s own existence near a small out-of-the-way town—*anglicé*, village—affords few materials in itself. But she dwells among her own people, and in this group her very pretty niece, Mary, and a ward of the same age, Grace, entrusted to Mrs. Margaret under rather mysterious circumstances, are and deserve to be the most conspicuous figures. These young ladies are play-fellows in childhood of Claud, Mary’s brother, who, not very inconsequently, falls in love by and by with Grace. The progress of this attachment, and of one between Mary and a young Laird of Lillieshall, is anxiously watched by good Aunt Margaret. Readers will find it difficult not to share in her concern about the “bairns.” Not that the circumstances are strikingly unusual—the course of true love never did run smooth,—nor are the characters elaborately chiselled; but there is at least about both sufficient individuality to *realize* the story. The truthfulness of its minute details and touches of quaint humour, fully redeem it from dulness or insipidity; above all, the cheerful, serene, holy atmosphere of Sunnyside pervades every line. The pure and high morality by which it is marked, attempered by a loving spirit, never degenerates into harshness, rarely becomes prim or precise. The patriarchal domesticities of rural Scotland, if deficient in sublime features, are refreshing as a level landscape of green fields; above all, the serene atmosphere of Sunnyside diffuses itself throughout the book—from that quiet little nook flows comfort and consolation for everybody. Fortune may frown, or far worse, clouds may darken the inner life; but, interpreted by a faithful heart, the dreariest trials grow light; sorrow and anxiety are lulled to

rest in the dutiful recognition of a Providence, in the bright prospect of a world that shall know no change.

We must remind our readers that it is the *morale* of the story, its soothing temperament, rather than its materials, that we commend. The merit of the work appears to us to consist, for the most part, in the medium through which everything is regarded, and that is the integrity of a clear and unclouded, yet thoughtful mind. The authoress understands well the inexpressible significance which often lies in word, look, or gesture, unheeded, perhaps, by a careless or indifferent spectator; she knows how incalculable a share what are called "trifles" have in determining the happiness or misery of mankind, often as the indication of feelings which are by no means trivial, often as leading accidentally to large results, sometimes by reason of their own intrinsic value; she knows that nothing is a trifle in the eyes of Love—that an entire life may be embittered by the misunderstanding of a moment. Human life, like perfection, itself no trifle, is yet made up of trifles; and these have found an attentive and sympathetic observer in Mrs. Margaret. It is in delicate touches of this kind, in such insight into the secrets of the heart and its so often incommunicable bitternesses, that we see the master hand of the true artist, or rather, to speak with peculiar reference to the work before us, the unerring instinct of genuine feeling.

"Merkland" is a more ambitious attempt, and proportionately less successful. We do not mean to say that it is devoid of merit. Pleasant recollections of the loveliest, in Scott's judgment, of all the counties of Scotland, it cannot fail to awaken in all who have ever been there; of Scotch landscapes and Scotch hospitality, of the less artificial tone of society among the rich than in South Britain, of the superior intelligence and education of the poor. Especially we must mention the glimpses, not few nor far between, into the interior of the manses, as not the least interesting feature of the book. It is on a feeling essentially characteristic of the Scotch in its intensity that a considerable part of the story is hinged—the sacred obligation, as it would seem to be esteemed, of preserving a patrimony or hereditary rights; while, through some of the subordinate actors, we are familiarized with the ecclesiastical *régime*. Independently of its own importance, this latter topic affords an analogy peculiarly interesting now to members of the Christian Church. A spirit of acquiescent inactivity, as is well known, marked alike the English and Scottish Establishments in the eighteenth century. The same devoted zeal which animated Wesley and Wilberforce in the south is here described as forcing its way upwards to shake off the incubus. This outburst of un-

feigned piety was probably accompanied in both divisions of the island with many spurious imitations—*parhelia*, as it were, of the true sun. Our authoress, we need scarcely add, sympathizes cordially with the “Highfliers,” as they were called, in distinction from the “Slaves to the Book,” the “Preachers of Proprieties,” a class not unfitly represented by one Mr. Bairnsfather, a good easy man; although her candour allows, that one of her imaginary heroes in this way, a Mr. Lumsdaine, was not altogether free from a *penchant* for interfering with other parishes. One other trait, not peculiarly, but especially Scottish, a sense of the advantages of noble birth, even without wealth, is very sensibly defended in a short passage in the third volume. There is a very affecting episode of the eviction of a clan by a stranger landlord, too revolting, we trust, to be of frequent occurrence.

The story, we must confess, strikes us as somewhat tedious now and then; it scarcely advances perceptibly towards its conclusion; and, in consequence, occasionally flags, notwithstanding the mysterious horror that hangs about the lonesome house on the sands, and the secret of blood on which it is based. The principal characters, too, are rather too carelessly drawn, with the exception of Mrs. Catherine Douglas, an old-fashioned, upright, strong-minded, kind old lady, who lives in the Tower—a personage not altogether unlike the *Ma chère Mère* in Miss Bremer’s “Neighbours.” She is certainly a tolerably complete character. But one thing we must cavil at. She would not have been less pleasing or natural if she indulged less freely in a species of strong language—“Beasts! Vermin! I say it!”—almost corresponding to profane swearing in a man. The other characters scarcely stand out with sufficient relief of outline or distinctness of execution to challenge any remarks. But we must be allowed to protest against Anne for a heroine. Great earnestness of purpose, and signal devotion of self in rescuing her brother’s good name, and the most exemplary forbearance towards her peevish stepmother; this is all very proper, but a few personal attractions would not have disfigured all these sterling qualities. On this point our heroine is wrapt in a not exactly romantic mystery, if we except a casual hint that she was very plain, if not ugly. Now we are far from wishing to compress all taste for beauty into the particular type dictated by any one theory. It is a happy thing that there is such variety of tastes. It gives more chance of every one being suited without mutual interference. But, generally speaking, the admirers of what we cannot better designate than as the *Jane Eyre* style of physiognomy, take care to insist on some one feature or other, or at least on the pervading expression, as able to redeem a face not otherwise loveable. And our toleration scarcely extends to

a heroine, a nonentity as far as appearance goes, who lives with us during three volumes in daily intercourse, and leaves us at last in wondering uncertainty on the important point, what sort of looking person it is that we have known so well. Not even in what she says is there such striking colour or *contour* as to relieve this insipid insignificance of face and figure. And now that we have ventured on this engrossing question of the beautiful, with reference to the human face divine, we cannot refrain from observing, that both in "Merkland" and "Mrs. Margaret Maitland" we are reminded of the female picture gallery in "Olive" and "The Ogilvies." In all there is a decided preference for a pale spiritual face, "with eyes like a flood" over prettiness of complexion, symmetry of features, and the other elements of a more physical, popular, Hebe-like style of loveliness. Again, on a very different subject, in the condemnation of the cold and formal consolation—"It cannot be helped," sometimes administered to the bereaved by their pastors, instead of a higher and more hopeful tone, we have noticed a coincidence between our two authoresses, curious from the very close resemblance of the expressions used.

It would not be difficult to select several very powerfully written passages from "Merkland;" we must be content, however, with the following brief extracts:—

"She was now proceeding to the house of her most dear and especial friend: an ancient lady, whose strong will swayed, and whose warm heart embraced all who came within their influence, and whose healthful and vigorous spirit was softened in a manner most rare and beautiful by those delicate perceptions and sympathies which form so important an element in the constitution of genius. Mrs. Catherine Douglas had seen the snows of sixty winters. For more than thirty of these, her strong and kindly hand had held absolute dominion at the Tower, yet of the few admitted to her friendship and confidence, Anne Ross, the neglected stepdaughter of Mrs. Ross of Merkland, an ill-used child, a slighted woman, held the highest place.

"The October sun was gleaming in the brown waters of Oran as Anne approached the Tower. A grey, old, stately place it was, defiant of storm alike and siege, with deep embrasures on its walls, meant for no child's play, and courtyard that had rung to martial music centuries, in the days of the unhappy Stuarts. Deep woods stretched round it, tinted with autumn's fantastic wealth of colouring. The Oran ran so close to the strong, heavy, battlemented wall, that in the old warlike days it had been the castle-moat, but the drawbridge was gone, and there was peaceful access now by a light bridge of oak. A boat lay on the stream, moored to an overhanging rock, by which Mrs. Catherine herself was wont to make the brief passage of the Oran. It was a favourite toy of Anne's also, in her happier moods, but she was too heavy of heart to heed it now."—Vol. i. p. 16.

Here is a graphic description of the stately Mrs. Catherine :—

“ ‘ I think you may let Mrs. Catherine have the whole merit of this, Jacky,’ said Anne, taking it down ; ‘ and do you have a ramble through the garden and find something more fragrant than those sunflowers. You will get some roses yet,—run, Jacky. Mrs. Catherine——’

“ ‘ Is trysted with undutiful bairns,’ said the lady herself, entering the room. ‘ And wherefore did ye not come to me, Gowan, and me in urgent need of counsel ? And wherefore did ye not open the door, ye elf, Jacky, unless ye be indeed a changeling as I hae aye thought ye, and were feared for learned words ? Come down with me this moment, Gowan ! Ye can fiddle about these bonny things when there is no serious matters in hand. I am saying, Come with me !’

“ Mrs. Catherine Douglas was tall and stately, with a firm step, and a clear voice, strong constitutioned, and strong spirited. In appearance she embodied those complexional peculiarities which gave to the fabled founder of her house his far-famed name—black hair, streaked with silver, the characteristic pale complexion, and strongly-marked features, harmonizing perfectly in the hue—she was dark grey. It seemed her purpose, too, to increase the effect by her dress. At all times and seasons, Mrs. Catherine’s rich, rustling, silken garments were grey, of that peculiar dark grey which is formed by throwing across the sable warp a slender waft of white. In winter, a shawl of the finest texture, but of the simple black and white shepherd’s check, completed her costume. In summer, its soft, fine folds hung over her chair. No rejoicing, and no sorrow, changed Mrs. Catherine’s characteristic dress. The lustrous silken garment, the fine woollen shawl, the cap of old and costly lace remained unchanged for years.”—Vol. i. p. 22.

In this passage the feelings of a timid young girl at leaving home and entering a strange house are not badly described :—

“ It was not a pleasant change ; to leave the cheerful voice and vivacious conversation of Lewis for those formal questions as to her journey, and the terrified stillness of little Bessie, as she sat tremulously by Mrs. Elspat’s side. Alice had scarcely ever seen before the dense darkness of starless nights in so wide and lonely a country, and as she looked out through the carriage-window, and saw, or fancied she saw, the body of darkness floating round about her, the countless swimming atoms of gloom that filled the air, her bounding heart was chilled. The faint autumnal breeze, too, pouring its sweeping, sighing lengths, through those endless walls of trees ; the excited throb of her pulse when in some gaunt congregation of firs she fancied she could trace the quaint gables and high roofs of some olden dwelling-place ; the disappointment of hearing, in answer to her timid question, that the Tower was yet miles away ! Alice sank back into her corner in silence, and closed her eyes, feeling now many fears and misgivings, and almost wishing herself at home.

“At last, the voice of the Oran roused her; there was something homelike in its tinkling musical footsteps, and Alice looked up. Dimly the massy Tower was rising before her, planting its strong breadth firmly upon its knoll, like some stout sentinel of old. The great door was flung wide open as they approached, and a flood of light, and warmth, and kindness beaming out, dazzled and made denser the intervening gloom. Foremost on the broad threshold, stood a young lady, whose graver and elder womanhood brought confidence to the throbbing girlish heart; behind stood the portly Mrs. Euphan Morison, the elfin Jacky, and, farthest back of all, a tall figure enveloped in the wide soft folds of the grey shawl, Mrs. Catherine’s characteristic costume. Little Alice alighted, half stumbling in bashful awkwardness; the young lady on the threshold came forward, took her hand, and said some kindly words of welcome; Jacky curtsied; the tall figure advanced.

“‘I have brought ye the young lady—Miss Aytoun, Mem,’ said Mrs. Elspat Henderson, and Alice lifted her girlish face, shy and blushing, to the scrutiny of her ancient kinswoman. Mrs. Catherine drew the young stranger forward, took her hand, and looked at her earnestly.

“‘A bit bonnie countenance it is,’ she said at last, bending to kiss the white forehead of the tremulous Alice. ‘Ye are welcome to my house, Alison Aytoun. Gowan, the bairn is doubtless cold and wearied, do you guide her up the stair.’”—Vol. i. p. 35.

We must confess to have been somewhat disappointed in reading the “Ladder of Gold.” The subject of it—the upward progress from poverty to enormous wealth of a railway speculator, and his subsequent fortunes in his new sphere—is so promising, almost, in fact, a virgin soil; the mania in question combines so remarkably the historic interest of an era, now, we may hope, gone by, with the vivid, bustling actuality of the present, as to rouse expectations, which, we regret to say, are not realized. Richard Rawlings, who climbs this golden ladder that connects gods and men, is almost the only character of any note in the book. Long-sighted and capacious in his schemes, prompt and energetic in execution, unembarrassed by tender feelings, and embittered against society by circumstances, he is no bad type of the spirit that fights its way to pre-eminence by a very law of its being, in the camp or at the ledger, according to the temper of the times. With this exception, there is little to remark upon. A few less trite revelations of the esoteric doings of railway boards would have made the book more piquant, and not less instructive. The story “progresses,” as the Americans say, slowly and heavily, without sufficient liveliness in the separate scenes to beguile the time. The lovers are insipid as waxwork; and the course of their true love, if it does not run smooth, has at all events found its way into a well-used channel. Finally, the

blemishes of the book, and they are neither very few nor unimportant, are aggravated by a stiff and pretentious style.

The three most remarkable books in our list we have still to mention—our limited space compels us to add, very cursorily. Of these, “The Initials,” in our opinion, quite deserves to come first. As the narrative of a year’s sojourn in Bavaria, it has claims of its own on attention, for graphic sketches of domestic German life in town and country; and this compensates for a certain degree of monotony in the incidents. The characters, too, are very good. The bewitchingly *naïve* Crescenz, and her far more interesting yet equally unsophisticated sister, Hildegarde; their strong-minded, good-natured, vulgar mother; their fastidious and indolent papa; the baron, a frank and genial sportsman, with his delightful wife; Count Zedwitz, honourable, manly, sensible, and ugly; and, not least, our handsome young Englishman, whom circumstances might have made *blazé* and selfish, but who, notwithstanding his tact and *savoir vivre*, is gay, generous, enterprising, amiable, with a strong dash of boyish vanity, a mischievous appetite for teasing, and an English habit of making himself comfortable: these make a very entertaining group. Besides all this, the masterly command over dialogue displayed, especially in subdued irony and dry repartee, with no small amount of easy, undidactic, practical sagacity; such qualities as those combine to make one of the most racy, chatty, life-like novels, that we ever remember to have seen: one not altogether unworthy to have proceeded from the pen of Mr. Thackeray himself. We have only to add that the tragic element is very small; and that “Flirtation” would be as good a name for the book as “The Initials.”

We regret much that our limits forbid us to indulge our readers with more than the following fragment:—

“To this speech no answer was made, and Hamilton followed them at a distance into the supper-room. He had lost so much time in the organ-loft that almost all the guests were already gone. The traveller, whose arrival he had witnessed, was in the act of lighting a cigar, with which he immediately left the room. An elderly, red-faced, stout gentleman, with a tankard of beer beside him, he soon discovered to be Major Stultz; nor did it require much penetration to recognise Mr. Schmearer, the painter, in the emaciated, sentimental-looking young man beside whom he seated himself. Hildegarde and her stepmother were nearly opposite; the former, after bestowing on Hamilton a look, which might appropriately have accompanied a box on the ear, fixed her eyes on the table; the latter bowed most graciously, and commenced an interesting conversation about the weather, the barometer, and her dislike to thunderstorms in general. When these topics had been completely exhausted, Hamilton hoped

that something might be said of the present inhabitants of Seon, but a long and tiresome discussion on the merits of summer and winter beer followed. Strauss's beer was delicious—Bock had been particularly good this year. 'Bock,' cried Major Stultz, enthusiastically, 'Bock is better than champagne! Bock is ——' Here he looked up with an impassioned air to the ceiling, and kissed the two first fingers of his right hand, flourishing them in the air afterwards. Words it seems were inadequate to express the merits of this beverage.

" 'Did you see that picture at the Kunstverein in Munich, representing a glass of foaming bock, with the usual accessories of bread and radishes?' asked Mr. Schmearer. 'It was exquisitely painted! I believe his majesty purchased it.'

" 'There is some sense in such a picture as that,' answered Major Stultz; 'I went two or three times to see it, and could scarcely avoid stretching out my hand to feel if it were not some deception.'

" 'A judicious management of reflected lights produces extraordinary effect in the representation of fluids,' observed Mr. Schmearer.

" A pause ensued: Major Stultz did not seem disposed to discuss reflected lights; the picture had evidently had no value for him, excepting as a good representation of a glass of bock, and his attention was now directed towards Hildegarde, whose flushed cheeks and pouting lips rather heightened than detracted from her beauty.

" 'Perhaps you would like to see the newspapers, madam?' he asked, politely offering the latest arrived to her stepmother.

" 'Thank you, I never read newspapers, though I join some acquaintances in taking the *Eilbote*, on condition that it comes to us last of all, and then we can keep the paper for cleaning the looking-glasses and windows.'

" 'There are, however, sometimes very pretty stories and charades in the *Eilbote*; young ladies like such things,' he observed, glancing significantly towards Hildegarde.

" 'My daughters must read nothing but French, and I have subscribed to a library for them. Their French has occupied more than half their lives at school, and now I intend them to teach the boys.'

" 'I should have no sort of objection to learn French from such an instructress,' said the Major gallantly.

" 'Indeed, I don't think any one will ever learn much from her,' said Madame Rosenberg, severely; 'but her sister Crescenz is a good girl, and the children are very fond of her.'

" 'You have two daughters!' exclaimed the Major.

" 'Stepdaughters,' she replied, drily.

" 'That I took for granted,' he said, bowing as if he intended to be very civil. 'The young ladies will be of great use to you in the housekeeping.'

" 'That is exactly what has been neglected in their education; if they could keep a house as well as they can speak French, I should be satisfied. When we return to Munich they must both learn cookery. I intend afterwards to give the children to one, and the housekeeping to the other alternately.'

“ ‘ You will prepare the young ladies so well for their destination that I suspect they will not remain long unmarried !’

“ ‘ There’s not much chance of that ! Husbands are not so easily found for portionless daughters !’ replied Madame Rosenberg, facetiously ; ‘ however, I am quite ready to give my consent should anything good offer.’

“ Hamilton looked at Hildegarde to see what impression this conversation had made on her. She had turned away as much as possible from the speakers, and with her head bent down seemed to watch intently the bursting of the bubbles in a glass of beer ! Had it been her sister he would have thought she had chosen the occupation to conceal her embarrassment ; but embarrassment was not Hildegarde’s predominant feeling ; her compressed lips and quick breathing denoted suppressed anger, which amounted to rage, as her stepmother in direct terms asked Major Stultz if he were married, and received for answer that he was ‘ a bachelor, at her service.’ With a sudden jerk, the glass was prostrated on the table, and before Hamilton could raise his arm its contents were deposited in the sleeve of his coat.

“ ‘ *Pardon, mille fois !*’ cried Hildegarde, looking really sorry for what had occurred.

“ ‘ You irritable, awkward girl !’ commenced her mother ; but for some undoubtedly excellent reason, she suddenly changed her manner, and added, ‘ You had better go to bed, child, I see you have not yet recovered from the recent alarm in the church.’

“ Hildegarde rose quickly from her chair, and with a slight and somewhat haughty obeisance to the company, left the room in silence. Madame Rosenberg continued volubly to excuse her to Hamilton, and, what he thought quite unnecessary, to Major Stultz also !

“ The Major listened with complacence, but Hamilton’s wet shirt-sleeve induced him to finish his supper as quickly as possible, and wish the company good night.”

“ The *Ogilvies*” and “ *Olive*” are by the same authoress : both considerably above the average of novels ; far superior to the insipid, artificial platitudes of works like *Emilia Wyndham* ;—not unlike *Lady Georgiana Fullarton’s* in their framework, while in morale they are more akin (with a difference be it observed) to “ *Jane Eyre*.” Like the former, they have in their favour no crowd of persons or events ;—in “ *Olive*,” indeed, there is a positive want of something going on, a sort of blank void in the action ;—a few pronounced characters fill the stage, and a good deal of space is devoted, not unprofitably, to the sensations of the inner life. Of the latter we are reminded by the heroes : they are so decidedly of the Mr. Rochester stamp, without his vices ; their beauty is strength, an imperious majesty of intellect, that relaxes itself only at the magic touch of love. Of the two we certainly prefer the “ *Ogilvies*” to “ *Olive*.” The main idea of the former, a woman’s love slighted, afterwards revenging itself by a feigned show of indifference, when time has brought

her idol to her feet, and yet has destroyed the possibility of their happiness, and while her heart is breaking all the time,—if not altogether new, is at least very forcibly expressed. Almost all the interest is centred in Katherine Ogilvy. Her idol, Paul Lynedon, is a strange choice; a cold, worldly, artificial man. The other characters are not very much developed. The most prominent of them, one Philip Wychnor, inclines to the opposite fault from Paul Lynedon, of a morbid susceptibility. Although intended, it would appear, rather as a model man, he will strike most readers, we anticipate, as what would be called in the Attic slang of the day, a “muff.”

“Olive,” in like manner to “The Ogilvies,” is devoted for the most part to the embodiment of one leading thought—the happiness of an unselfish life, and the possibility of inspiring love without advantages, nay, with positive drawbacks in personal appearance; we have already alluded to the apparent preference for pale women, and unapproachable men. With regard to the moral character of the book, it is very good, with the exception of occasional flights of philosophy, vague and not very intelligible, sometimes even rather morbid. Most readers will complain, we suspect, that there is too much preachment in Olive; more, we mean, than is appropriate or seasonable in works of a light texture. It would almost lead one to imagine that the unquestionable success of the Ogilvies had “impeded the wings” of Olive with too confident reliance on a like reception, and a consequent disregard for the popular judgment. May we suggest, that a more frequent use of a *condensing* process would be an improvement in the future novels which we hope to have an opportunity of welcoming from the same pen?

We could gladly linger on this enchanted ground a little longer. It is almost like parting from living friends to say goodbye, as we turn the last page of a novel, to those in whose hopes and fears we have for some time had a part. Stupid beyond measure must that novel be which does not wake some common chord; which does not present some embodiment to its readers with which he may identify his own emotions, and soothe them by the very act of doing so; which does not treat of wants and anxieties, in which he may trace his own reflected, and thus be beguiled into forgetfulness; which does not recall the loved images of many absent friends, and introduce him to some new phases of human nature. And we have had very satisfactory materials to analyze in the books before us. One among many modes, at least, if not the highest or most direct, of inculcating truth and encouraging goodness, is a good novel. For this reason, such books as those which we have noticed deserve a hearty welcome. And even those readers who only desire

rest and recreation, may expect, if they will believe us, to find more amusement from them, in all the luxury of slippers, an arm-chair, and a bright fireside, than polished boots and crowded *conversazioni* usually afford.

We must, however, avail ourselves of the two last novels on our list, "Caleb Field" and "Rose Douglas," both of which have very recently appeared, as an apology for lingering a little longer in this fairy land of literature. "Caleb Field" is just what might be expected from the graceful pen of the Authoress of "Mrs. Margaret Maitland" and "Merkland." It is more akin to the former of these works; decidedly not unworthy to stand beside either of its precursors. In one respect it differs considerably from both of them. It purports, as the preface informs us, to vindicate the Nonconformist divines of Charles II.'s time from unmerited neglect. That extraordinary epoch, "the climax of the old world, the seed-time of the new," as it is well styled in the preface, branded too as it was by the awful visitation of the great Plague of London, affords a grander theme than secluded villages in North Britain. But it is not in large and elaborate description, in gorgeous colouring, or theatrical effect that the merits of Caleb Field are to be found. On the contrary, any expectation of such panoramic views as Manzoni has given of the horrors of the Plague of Milan, or even of the Hogarth-like touches of our own Defoe, will be disappointed here. But this, and other deficiencies—for example, the want of a good plot, and of incidents to diversify the rather monotonous level of the story—are amply compensated for by peculiar beauties; by the true sublimity of a wise and reverent spirit; by lofty representations of calm heroic fortitude; by a kindly and penetrating perception of character; by the quiet tastefulness of a pure and simple style, the fit vehicle of an earnest, tranquil, harmonious mind.

It is a new aspect of the reign of the licentious Charles to introduce the reader to the doings and sufferings of some of the two thousand ministers who were deprived of their position in the English Church by the Act of Uniformity. Three or four of these are brought into the story; very graphically are they portrayed, and very pleasant it is to contemplate such gentle magnanimity. And yet controversy is not allowed to mingle its uncongenial ingredients in the story.

The following passage, and we wish that we could find room for more, exhibits the conclave of Presbyterian ministers during the fury of the pestilence:—

"So they went forth together. Their meeting was in a vestry attached to the old church of St. Margaret's in Westminster. The

Presbyterian ministers of London were assembling in their classes when Vincent and Field entered the room.

“ In the chair sat a little quick, lively man, with small vivacious features and keen dark eyes. He was one of that peculiar class whose names are redolent of solemn quip and quaint antithesis, balanced with a nice art and dexterity forgotten in our times. A study-chair in some fair vicarage, in ‘ the leisure of the olden ministry,’ elaborating courses of quaint sermons, and decking his beloved Bible with the flowery gathering of an antique philosophy, somewhat artificial it may be, yet having life in its veins withal, would have better realized the abstract idea of suitability in the case of Master Chester, than did the Moderator’s chair of this small but solemn assembly within the bounds of stricken London. But that race of quaint commentators was a race fearing God truly and faithfully, and their representative here, strengthened by such loyal love and reverence, had risen to the top of this bitter wave, and, relaxing the scrupulous cares of composition which formed his most congenial work, was now labouring in the fervent inspiration of that dire and solemn necessity, no less zealous and manful than any there.

“ Beside him sat a good-looking, portly, middle aged man, with a ruddy and healthful face. He belonged to another distinct class. Master Franklin had not the gift of originating or suggesting ; but he had in an especial manner, in that docile, laborious, patient strength of his, the gift of carrying out. An unobtrusive, placid, humble man, he accomplished heaps of work unwittingly, and went on day by day in a series of dumb unthought of heroisms, appreciated by few men, least of all by himself ; for there was little light, save the quiet radiance of goodness to set off his labour withal, and in the unfeigned humility of his honest heart he himself would have been the first to repudiate the praise due to his constant devotion.

“ The preacher, Vincent, had an individuality strikingly distinct from these. Prone to examine the depths of his own sensitive spirit, he had endured at the outset of his career a fiery ordeal akin to that of the famed dreamer of Bedford ; and, fighting through spiritual perils, like the pilgrim of that wondrous vision, had become at last a great master in all the subtle processes and unseen movements of the heart. ‘ Cases of conscience,’ such as formed no unimportant part of the ministerial labours of those zealous times, were referred to him from all places. In probing the wounds, disentangling the twisted threads of motive and design, elucidating the hidden working, and evolving the secret struggles of the soul, he was at home and strong ; and, joined with this peculiar gift, was a melancholy bias of mind, a tendency to despondency and speculative grief, a mood akin to that of the preacher of old, who, as the conclusion of his experience, leaves the sorrowful record to us, that all is vanity. A certain melancholy vivacity of expression and overwhelming earnestness made him, as it makes his class still, an especially effective preacher, and in this time of singular distress the effect was proportionally increased.

“ Caleb Field was less a man peculiar to that age than any of all these. No youthful cavalier in the gay court of Charles had a more

gladsome enjoyment of life than this sombre Puritan minister of doomed London. No tender-hearted maiden or loving mother had a sympathy more quick, a compassion more gentle than was his. So full of joyous congenial life with all that was true and honest, lovely, and of good report, and withal in his strong vitality having so great a fountain of deepest pathos within—a truly human man, akin to all who wear the wondrous garment of this mortality.

“And so it happened that this man’s influence was less subject to ebbs and flowings of popular appreciation than the rest. It was as perennial and constant as life itself, for, in all that pertains to life, many-sided and various, his warm humanity made itself a part.

“The other members of the Church-court were but different phases of those various kinds of men; devoted with all their differing individualities to the one fervent solemn work, upon which lay the awe of martyrdom, the almost certain conclusion of death.”

“Rose Douglas, the Autobiography of a Minister’s Daughter,” has been kept back hitherto from publication, through a fear in the writer, as the preface says, of following too closely in the track of Mrs. Margaret Maitland. But there is no slight difference between the two books! Rose Douglas is much longer, and less diversified by the “moving accidents” and vicissitudes of a story. Another and a cognate difference is, that the descriptions in Rose Douglas have the air of a literal copying from the pages of past experience, rather than of proceeding from that creative imagination, the half-poetic, half-philosophic instinct of generalizing, which presents the veriest truth in the most interesting form, by digesting, discriminating, and reproducing as its own the impressions which it has imbibed. In fact, Rose Douglas is scarcely to be ranked with novels. With due allowance for the diametrical opposition between one of the gayest courts that has ever been in Europe, and the domestic life and retirement characteristic of a Lowland manse, there is something in the work to remind the reader of “Mr. Pepys’s Diary.” Or, regarded as a work of art, perhaps it would be nearer the mark to say that the opening chapters, especially, would naturally be classed under the same category as the disjointed scenes and fragmentary narratives of “Sam Slick,” or its twin-brother, the “Attaché in England.” For fidelity, accuracy, and excellence of intention, at least, if not for higher artistic excellencies, in the descriptions of quiet everyday life in Scotch society among the middle classes, Rose Douglas deserves much approbation, and may be included among those genial works of fiction which tend to purify the character and tranquillize the mind.

We have already expressed satisfaction at the general improvement in novels of recent date, particularly because they bear the marks of a more searching analysis into human character, its impulses and motives, and a disposition not to rest contented with

the superficial traits and conventional peculiarities, however striking, of men and manners, but to grapple in earnest, and in a deep moral spirit, with the great riddle of human life. For it cannot be deemed an intrusion into the sacred precincts of religion—it is a very different thing from the controversies of so-called religious novels—it is of almost inestimable importance as subsidiary to the dogmatic teaching of creeds and commandments, for the novelist to throw what light he can on the strength and weakness of the heart of man, and to suggest how his affections and passions may best be cultivated to the true purpose of his being. It is not too much to say, that the novelist has it in his power to bring medicine to the soul; to aid in soothing its perplexities and regrets; to animate its flagging energies. Even to those persons who decry novels as frivolous, it must be obvious, that they testify to the drift of the literature of the day—“*vento paleæ jactantur inanes.*” Much more may those, who regard novels as no inadequate vehicle of precious truths, rejoice in their present tone. And this congratulation applies to the *Scotch* novels under our notice, with especial emphasis. We do not mean to imply that there is any very strong contradistinction between the literature on this side and on that side of the Border. Will anyone deny, that there is almost as much difference between the northern and southern counties of England, as between Scotch and English at the present day? With such incessant intercourse as now exists, especially among the literary, between North and South Britain, it would indeed be strange if the literature of the one district did not keep pace with the other, either for improvement or the reverse. Nevertheless, each nation has its own appropriate contribution to bring to the common fund. Difference of race, difference in the system of education, the accumulated inheritance of customs and traditions transmitted from age to age, and, in the Highlands, the additional difference arising from the remains here and there of the old patriarchal *régime*—all this gives an unmistakable individuality. Nor will any thoughtful observer, however anxious for the closest amity and reciprocal influence in progressive civilisation, desire such characteristics to be effaced. There is quite enough that is distinctively Scotch about the novels in question, to give the relish of novelty to the English reader; and, we venture to predict, that such readers will not be least ready to confess their obligations, not for amusement merely, but of a more solid kind; after dwelling for awhile in thought among the primitive simplicities of homely life, which still linger in the bracing air and stern scenery of Scotland, and listening to the practical wisdom, stamped with the marks of a grave and conscientious temperament, for which her children have always been remarkable.

- ART. VI.—1. *The Saint's Tragedy; or, The True Story of Elizabeth of Hungary, Landgravine of Thuringia, Saint of the Romish Calendar.* By CHARLES KINGSLEY, Junior, Rector of Eversley. With a Preface by Professor MAURICE. Second Edition. London, 1851.
2. *Twenty-Five Village Sermons.* By CHARLES KINGSLEY, Junior, Rector of Eversley, Hants, and Canon of Middleham, Yorkshire. London, 1849.
3. *The Message of the Church to Labouring Men: a Sermon, preached at St. John's Church, Charlotte Street, Fitzroy Square. (June 22, 1851.)* By CHARLES KINGSLEY, Jun., Rector of Eversley. London, 1851.

THE “Saint's Tragedy” and the “Village Sermons” of Mr. Kingsley have been before the public for so considerable a time, that, having been prevented from bestowing on them earlier notice, we may be thought precluded from making them the subjects of remark. It might have been so were they writings in a more popular form, and thus likely to obtain a rapid circulation; but it so happens that neither a tragedy nor a volume of sermons belongs to the most generally attractive class of books. Unless either the reputation of its author, or some extrinsic circumstance, direct attention peculiarly to it, a tragedy, even of decided merit, may in these days easily escape the notice of all but a few; and of sermons, it may be said, that the individual species are often supposed, with much reason, to have a very limited *habitat*, and to be regarded with little interest out of their native region. We are now glad to make the publication of a second edition of the tragedy the occasion of offering some remarks upon the two works whose titles we have placed first at the head of this Article.

An interesting, and, it must be admitted, an important question is naturally enough suggested by a volume of sermons from the author of a dramatic poem. The question is, What sort of sermons are we to look for from a poet? or, in other words, What relation does the gift of poesy bear to the gift of preaching? It can hardly be necessary for us here to premise, that in using such language we have regard only to the natural endowments or intellectual capacities and tendencies of the preacher; the deep inward and spiritual life, of which, in all true preaching, these are but the organs and exponents, we well know to be confined, thank God! to no single form of mental structure, nor stage of growth.

To the question which we have thus ventured to propose, we

believe the answers given by any considerable number of readers would indicate by no means unanimity. To many, what cannot be formally called sacred in science or literature, still seems profane, and the field over which it is permitted to the Christian to range a very narrow one; for the heresy by which reason is divorced from religion still lives and does its work,—fatal to each, because neither singly, but only both in union, can be productive of any worthy offspring. It is probably not without reason that Mr. Maurice, in the valuable preface by which his friend's tragedy is introduced, anticipates from some quarters serious blame to any clergyman who shall write a true drama, exhibiting human beings engaged in some earnest struggle, even while the privilege of expressing his own thoughts, sufferings, and sympathies in any form of verse may be easily conceded to him.

That such views should still linger among us, will hardly surprise any who have considered how low an estimate had come to be entertained of poetry, and particularly of the drama. Poetry, which had from the beginning given, as it will doubtless to the end continue to give, expression to the deepest, the highest, the holiest of human thoughts, had come to be regarded as something almost too trivial even for the most vacant hour; and the tragedy, which exhibits the fateful struggle of man with circumstance or with himself, terrible in its aspects, momentous in its issues, the elder drama teaching of the fightings without, the christian rather of fightings within, had lost all significance for an age in which the struggle itself was all but disregarded, or counted as childish enthusiasm. In determining how far the required qualities of a poet, and more particularly of a tragic poet, are also the required qualities of a preacher, it will be necessary to consider in succession their respective functions. What is implied in being a poet? what in being a preacher? We are not here forgetting, that in thus stating the question we seem, in words at least, to be comparing things which do not admit of comparison; the word poet being expressive of peculiar mental structure and powers, the word preacher merely meaning the holder of a recognised office. Of course it is not in this sense that we use the latter word, when thus comparing the two functions. It would indeed be well for us if all whose office it is to preach had, in a much larger degree than with truth can be said of them in any of the Churches, the appropriate endowments; and for our present purpose we shall term preachers only those who have these endowments in such considerable measure as to make it possible for us to compare them with poets.

In saying of the Drama that it essentially represents a struggle, it is implied that the dramatist must be in possession of some

form of earnestness; for he must have had the means of first representing to himself, through sympathy, the contest which he is able effectively to depict. The general truth of this remark will be admitted, although certain modern dramas (Goethe's, for instance) would seem to lead to the conclusion that it is liable to some exceptions, there being those who can achieve through sheer force of intellect, a result which is attained by others only through a deeper sympathy. In one way or other, at least, the tragic author must be able to express, with a power peculiar to himself, human desires and passions, and that not merely singly, but in their mutual relations; for he represents them not in the abstract, but in the concrete form, and has to produce men, not monsters. The concrete form of all true poetry will explain to us how great poets have been also men of practical sagacity in the management of affairs, which cannot be said of abstract thinkers; and if we regard the Germans as the most highly gifted in the latter respect, but comparatively poorly endowed in the former, the political incapacity which is now grieving all right-minded men may perhaps be traced to a foundation deeper than the long want of appropriate institutions. Perhaps no better instance could be chosen of the falseness of popular judgments on such matters than the very common one of regarding poets as capable only of dreams, and therefore powerful only in dreamland, but having, in truth, no work to do on this solid earth. Looking only at the sensitive poetical temperament, but not at the informing mind which lies under it, perhaps one might easily fall into the mistake, which yet a little thought might as easily correct. Either the study of any of the great poems, or the history of their authors, would lead us to a better conclusion. What piece of business will it be supposed that Shakspeare could not have transacted? Surely he could have done all that he has enabled his embodied conceptions (called with perfect propriety in one sense his creatures) to do. Cardinal Wolsey, for instance, the sumptuous Wiseman of those days, looks very like a man who knew something of this world—of men, their strength, weakness, motives, subjection to management; or going up into higher regions, what form of social agency is there which is not better seen in these pages than almost anywhere else? It did not, indeed, happen to be Shakspeare's particular work to transact in great affairs, but he managed the Globe Theatre at least successfully, which sufficed him. Dante, Milton, and Goethe, to name no more, were all men of affairs. Our readers will not extend these remarks to other departments of poetry than the epic and the dramatic; although even among the lesser poets might be found something corroborative of our views. We have been the more anxious to call attention to this prac-

tical sagacity as a poetical faculty, because it will be seen to have much value for our present purpose, and because it is often overlooked.

As the dramatic poet must have much knowledge of Man, so also of Nature. "All language," it has been said, "is symbolical;" certainly much of it is so, and Mr. Emerson has well written that "Nature is an interpreter by whose means man converses with his fellow-men." It is only an intimate relation and a close familiarity with Nature that enables the poet to find the proper symbols of his thoughts, and thus to import from Nature into language what shall in future become current coin, the worth of which is well known and generally recognised. But a poet must not only import the new; he must also use the old with a peculiar unequalled significance. This is attained by the same innate sense of their fitness and relation to things by which he appropriates the new, and without the possession of this delicate indescribable faculty seems unattainable. Study will do much, but no man can study himself into being a poet. Most men and women may be taught to write verses—many to write them with great facility; not a few to write what will win for them the applause and wonder of their little circle; but the old saw still stands impregnable—"Nascitur, non fit, poeta." Besides being much else to him, Nature is thus the poet's vocabulary; and when intently gazing and supposed to be dreaming, he may, in fact, be looking for a word. In poetry, then, as we have perhaps the earliest, so we have the latest and highest form of human speech. Scientific speech is but partial, and of the understanding—abstract, with no human sympathies; but whenever the whole being is moved and would express itself, the language is poetical.

Of the pervading formative idea in all true poems, of the reverence which seems essential to poets of the higher class, and of a hundred other things which our readers have learned to associate with the writings of these "our first of men," we have no need to write here; enough if we have given them a few examples of the kind of qualities we mean to make use of in our present argument,—and so let them conceive of the Poet.

Before turning to the other branch of our inquiry, a few words may be said on the nature of the particular drama which has given occasion to these remarks, for the sake of such of our readers as may have no acquaintance with that distinguished poem.

In the Saint's Tragedy, Mr. Kingsley has attempted to exhibit some of the most interesting and important features of life as it existed in the Middle Ages; the period referred to being the first half of the thirteenth century. The most pro-

minent of these are well expressed in the following passage of the introduction :—

“In deducing fairly, from the phenomena of her life, the character of Elizabeth, she necessarily became a type of two great mental struggles of the Middle Age ; first, of that between Scriptural or unconscious, and Popish or conscious purity : in a word, between innocence and prudery ; next of the struggle between healthy human affection, and the Manichean contempt with which a celibate clergy would have all men regard the names of husband, wife, and parent. To exhibit this latter falsehood in its miserable consequences, when received into a heart of insight and determination sufficient to follow out all belief to its ultimate practice, is the main object of my poem. That a most degrading and agonizing contradiction on these points must have existed in the mind of Elizabeth, and of all who with similar characters shall have found themselves under similar influences, is a necessity that must be evident to all who know anything of the deeper affections of men. In the idea of a married Romish saint, these miseries should follow logically from the Romish view of human relations. In Elizabeth's case their existence is proved equally logically from the acknowledged facts of her conduct.”

This may be termed the leading idea of the play. The story into which it has woven itself rests, at all important points, on a distinct historical basis ; and is, in the main, as follows :—Elizabeth, daughter of the King of Hungary, had been in childhood betrothed to Lewis, Landgrave of Thuringia, to whose court she had been duly brought “with vessels of gold, silver baths, jewels, and *pillows all of silk.*” When the play opens, she had arrived at womanhood ; and the bestowal of her ardent affections on Lewis had prepared the way for their marriage, which soon follows. In Lewis, the enthusiastic, devout, sympathetic Elizabeth found a generous, knightly, affectionate husband ; but not one in whom her deeper feelings could find repose or direction. For this was required an intellectual and spiritual cultivation which belonged not to him, nor, with rare exceptions, to the most accomplished of his order. The spiritual guidance which he could not afford she received from Conrad of Marpurg, a monk, the Pope's Commissioner for the suppression of heresy ; who is, excepting Elizabeth, the most important character in the play. In Conrad is exhibited the struggle between the intuitive direction of a true and noble mind, and that imposed upon it by a corrupt and debasing ecclesiastical system, by which the highest human relations are disowned and dishonoured. It is a key to some of the most distinguished and apparently anomalous characters in history, such as Dunstan, Becket, and Dominic, “whom,” as Mr. Kingsley justly says, “if we hate we shall never understand, while we shall be but too likely, in our own way, to copy them.”

By nature capable of the highest enjoyment of married life, hardly has Elizabeth tasted its rich blessedness when the subtle tempter, who has undertaken to make her a "saint," suggests the impurity of that union, which for us symbolizes all that is highest; and teaching that "*sister*" is a holier name than "*wife*," thus plants a worm in the bud which had else matured to full flower and fruitage. Five years of life thus divided between the husband and the priest—between the true purity which God would have and the counterfeit by which the Church supplanted it—having passed over Elizabeth, with watchings, and fastings, and ceaseless labourings among the meanest of the poor and in the most menial offices, she was left a widow. Lewis had joined the crusade (A.D. 1227) to Palestine, which he never reached, having died of fever at Otranto. Insults and cruel hardships were now heaped on her. She was driven from her castle, and with her two children left to wander houseless, exposed to hunger and bitter frost. Intent on making her perfect, according to his idea, Conrad removed from her her "carnal" children, and persisted in adding day by day to the load of suffering under which her macerated body at last gave way; her imagination being alternately excited with the strongest spiritual stimulants, and allayed with intolerable servitude. Amid dreams, and visions, and ravings she died, a wonder-working saint; and through the efforts of her director was duly canonized, on credible evidence of her saintly life, and of the miracles wrought by her holy relics. Thus lives Elizabeth; distinguished in history as a favoured patron of the poor. Conrad, in admitted violation of historical fact, is represented as hardly surviving her; having been, as was the case, put to death by some of the nobles and peasants whose wives and children he had burned as heretics.

This mere outline of the story, in which none of the subordinate characters have been even named, must have suggested to our readers the extreme difficulty of treatment inherent in the subject. It will probably seem to some of them that, to quote from the preface by Mr. Maurice, "in certain passages and scenes the author has been a little too bold for the taste and temper of this age;" and there are those who on this ground have deemed the subject unfit for dramatic treatment, a judgment in which we do not coincide. The author could not, of course, but be sensible of this difficulty of "satisfying at once the delicacy of the English mind, and that historic truth which the highest art demands," (*Notes*, p. 248;) and he refers "those who may be shocked at certain expressions in this poem, borrowed from the Romish devotional school, to the Romish booksellers, who find just now a rapidly increasing sale for such ware."

While it might be too much to say that Mr. Kingsley has

altogether overcome this difficulty, it may be said that he has at least combated it manfully and with no small success; this his first dramatic poem being a work of much promise and of undoubted genius; in which, with a strict regard to historical truth, the spirit of the age to which it relates is so embodied as to leave on the mind of the reader a very definite and lasting impression. In some of the dialogues and soliloquies there is much power; but the excellence of the lyrical passages is the most remarkable. Some of these are exceedingly beautiful. Take, for example, that with which the Drama opens, sung by Elizabeth sitting on the steps of a closed rural chapel.

- “ Baby, Jesus, who dost lie
Far above that stormy sky,
In thy mother's pure caress,
Stoop, and save the motherless.
- “ Happy birds! whom Jesus leaves
Underneath his sheltering eaves;
There they go to play and sleep;
May not I go in and weep?
- “ All without is mean and small,
All within is vast and tall;
All without is harsh and shrill,
All within is hushed and still.
- “ Jesus, let me enter in,
Wrap me safe from noise and sin,
Let me list the angels' songs,
See the picture of Thy wrongs:
- “ Let me kiss Thy wounded feet,
Drink Thine incense faint and sweet,
While the clear bells call Thee down
From Thine everlasting throne!
- “ At thy door-step low I bend,
Who have neither kin nor friend;
Let me here a shelter find—
Shield the shorn lamb from the wind.
- “ Jesu, Lord, my heart will break;
Save me for Thy great love's sake!”

As another example we may refer to the chorus of crusaders, in the eleventh scene of the second act.

Of the more passionate dramatic passages it is difficult to find one which will at all bear removal from its proper place in the play, but the following may be quoted from the fourth act. It is Elizabeth's soliloquy in a convent chapel, where she had been left to ponder the proposed withdrawal of her children from all her care for the future.

" *Elizabeth.* Give up his children? Why, I'd not give up
 A lock of hair, a glove his hand had hallowed;
 They are his gift, his pledge, his flesh and blood,
 Tossed off for my ambition! Ah, my husband!
 His ghost's sad eyes upbraid me! Spare me, spare me!
 I'd love thee still, if I dared; but I fear God.
 And shall I never more see loving eyes
 Look into mine until my dying day?
 That's this world's bondage: Christ would have me free;
 And 'twere a pious deed to cut myself
 The last, last strand, and fly: but whither? whither?
 What if I cast away the bird i' the hand,
 And found none in the bush? 'Tis possible—
 No, there's worse than that.
 What if He but sat still and let me be?
 And these deep sorrows, which my vain conceit
 Calls chastenings, meant for me—my ailment's cure—
 Were lessons for some angels far away,
 And I the *corpus vile* for the experiment?
 The grinding of the sharp and pitiless wheels
 Of some high Providence, which had its main-spring
 Ages ago, and ages hence its end?
 That were too horrible—
 To have torn up the roses from my garden,
 And planted thorns instead; to have forged my griefs,
 And hugged the griefs I dared not forge; made earth
 A hell for hope of heaven; and after all,
 These homeless moors of life toiled through, to wake,
 And find blank nothing! Is that angel world
 A gaudy window, which we paint ourselves
 To hide the dead void night beyond? The present?
 Why here's the present—like this arched gloom,
 It hems our blind souls in, and roofs them over
 With adamant vault, whose only voice
 Is our wild prayer's echo; and our future?
 It rambles out in endless aisles of mist,
 The farther still the darker—Oh, my Saviour!
 My God, where art Thou!"

We have no space for farther quotations; and with this slight notice of the Saint's Tragedy we shall now revert to our argument, of which we have to take up the second part, by inquiring into some of the constitutive peculiarities of the Preacher.

When it is asked, then, on the other hand, What is the preacher? one feels inclined to respond, What is he not? Is there any physical, mental, or moral endowment which may not be brought into his service? An imposing person, a rich musical voice, a glittering eye that holds one, fitting artistic gesture; whatever helps or makes the orator, does not the same also help

or make the preacher? That one may be an orator in the pulpit, whether that pulpit be such an one as the first we read of, the "tower of wood" from which Ezra expounded to the people standing round him in the Watergate-street of Jerusalem the long-forgotten law; or some appropriated humble implement, a cart or a barrel; or one of the "stones that name the underlying dead,"—in Wesley's case a father's grave,—over and around which a devout people, with much pains, are gathered to hear; or, as in our days usually, be a comfortable velvet-cushioned box, from which the speaker, distinguished by a classical gown, discourses to an audience as comfortably circumstanced as himself, while they rest in square or oblong boxes, ingeniously contrived, in defiance of apostolical denunciations, to prevent any possible contact with "vulgar brethren." From any of these it may be an orator who speaks; and the character of the oratory may have an appreciable relation to the nature of the pulpit.

This leads to an interesting inquiry. We remember a remark made by a friend, as we came out of church, after hearing a sermon by one of the most distinguished of our living preachers; "I have been thinking," he said, "how impossible it is to be at once an orator and a teacher." It is, we believe, perfectly true that the two functions are essentially opposed, although the same speaker may exercise each in succession; and it explains the fact that the hearers of sermons are in this divided into two classes, with contrary desires and judgments. Those who love oratory praise the orator; those who love teaching the teacher; while there are some whose rule it is to hear the orator now and then, but habitually to resort to the teacher. If it be asked to what extent there is room for oratory, speaking strictly, in the pulpit, our answer will assign to it a limited sphere. The immediate object of the orator is specific action; and indeed so directly does speech, in this instance, lead to action, that it seems rather action than words. Without understanding this we shall hardly appreciate or even admit the truth of the great Greek orator's thrice-told injunction, according to which *delivery* is everything; for what is plainly untrue of speech in general may be quite true of the kind of speech called oratory. Whenever the object of a speech is to produce a definite action it may come within this class; and the more immediately the action is to follow, the more successful, relatively, will be the oration. Where the action to follow is inevitably postponed, or is of its nature continuous and enduring, it is usual to make use of an oath or pledge, taken under the influence of the oration, before the judgment has had time to resume its sovereignty; feeling and the orator's power still predominating. Peter the Hermit's preaching of the

Crusaders, and Father Matthew's of Temperance, may be taken as examples. Oratory can do little to make a man repent or believe in any profound sense ; but it may be most efficient in persuading him to submit to the external acts of baptism. It may thus be an invaluable weapon to the Romanist missionary, while the Protestant one will find it of little use. Indeed, in some of its aspects it seems to exert rather a physical than a rational influence, and to produce effects more nearly resembling those ascribed to Mesmerism than any others with which we are acquainted.

The strange manner in which an audience is brought into subjection to the speaker's will must have often suggested the analogy (if, indeed, it be not something even more nearly kindred) to which we have referred ; the rather that a certain force of will, quite irrespective of power of thought, seems to belong to great orators. It will thus appear that the state of mind in his hearers desired by the orator is very different from that desired by the teacher ; the one would rouse them to action, the other would still them to reflection.

We ought, perhaps, here to notice a very frequent modern use of oratory, where something different from immediate specific action is aimed at ; that, namely, where the object is to inculcate a maxim, or to brand with a nickname. The extent to which this remark applies both to political and to so-called religious meetings we leave our thoughtful readers to consider. One who well deserves to be listened to has said, " The lower portion of the religious public in England scorns principles, delights in proper names." If it be so, we can well understand that here oratory may do much. It can deal easily with names, although hardly with principles. In the pulpit its most obvious use would seem to be found in what are called " Charity Sermons ;" that is, in those comparatively rare cases where the discourse is directed to the announced end. Beyond this, it may perhaps be said with truth, there is little room for it ; unless upon extraordinary occasions, when it may be thought necessary to urge to some particular act ; and it must be here said that, inasmuch as (to quote from a familiar treatise) " oratory contemplates the investigation of truth only as a secondary object," the frequent practice of it is extremely perilous to the mind ; which, if at all abandoned to it, may lose the power of estimating, with any justice, the relative weight of the truths which it has been accustomed to value only in so far as they could be made to serve an immediate purpose.

We are now come to a point at which it will be necessary for us to look at a very serious question. We have to consider

what is the subject-matter of which the Christian preacher has to discourse; for according to our view of that will be our estimate of the required endowments. In the threshold our readers may be reminded that, however modern usage may have assigned to such words as "preach" and "sermon" a definite or even a technical meaning, we find nothing of the same sort in the New Testament, which contains no indication of anything nearly resembling a modern sermon; and in which the terms translated by the word "preach" and its derivatives, suggest chiefly either the public announcement and proclamation of a message, or the impromptu outpourings of intense spiritual intuitions, closely related, if not identical with those of the ancient prophets; expressed most frequently, respectively, by the words *κηρύσσειν* and *προφητεύειν*; it can hardly be necessary to add that, etymologically, a "sermon" is but a speech. Upon any discussion of the subject now alluded to we have no intention of here entering; it is enough if we are not prevented in our inquiry by any biblical objections.

Christianity has been variously regarded, but chiefly in one of three aspects; as being a system of doctrine, theological or philosophical; a system of morals and a law; or, thirdly, as being characteristically neither of these, but a life; depending on a Spirit, and essentially related to a Person. The last view, which is becoming more and more felt to be the only one which will at all explain the phenomena exhibited in history, in its true sense includes the other two; inasmuch as a life, however spiritual in its nature, must have a morality, and can, at least to some extent, be explained and represented abstractly or scientifically. According to either of the two former views, but especially according to the first, the required powers of the preacher would be predominantly the scientific and logical, for he will have to treat of things considered abstractly; according to the last view they appear rather to be the poetical, for he will have to treat of things concretely, and to represent a life. If it be asked, by whom life has been most vividly portrayed in words, it must be at once answered, by poets; and if we were here at liberty to speak without reserve of the prophetic gift, we must be at once reminded that all our knowledge of it has been in union with the poetical—the same word frequently expressing both, as in the Greek language, so that Saint Paul (Tit. i. 12) writes of the poet Epimenides as "one of their own," that is, of the Cretan "prophets," (*προφήτων*); and how much poetry has the world seen before or since which does not appear feeble beside the words of David or Isaiah and the other Hebrew prophets, or of the Apocalypse of Saint John? How largely the same element is to be found in the teaching of our Lord himself

must surely have been forgotten, when his living and life-giving words were regarded and treated as exact formal definitions. We seem, in short, brought to the conclusion, that to the higher kinds of preaching the poetical element has much to contribute; and that without it (if even with it in these days) we are not to look for prophecy. If the spiritual power of so piercing the present in the very essence of its life, as to be able, in some measure, to read in it also the future, which we may believe to be implicitly contained there, in its principles at least if not in its details, may be in some sense called prophetic, possibly we are not yet out of all reach of such foreseeings. Should this, however, be deemed a "devout imagination," there will still remain to the preacher who is poetically gifted, an insight into the realities of the things around him, which are hidden from other eyes by a veil of traditions and conventionalities. If he combine with a high measure of this insight a moral energy so intense that it cannot but express itself in great actions, he is likely to be one of the rare benefactors of mankind, who appear now and then to be wondered at, stoned to death, and abandoned to dishonour, until another generation shall build their sepulchres.

We have insisted upon the possession of gifts essentially poetical, as being of the highest importance to the preacher; but we must not omit to record wherein the poet, as an artist, fundamentally differs from the preacher. It will be to our readers quite a familiar and established rule of criticism, that the very nature of a proper work of art excludes any definite moral aim; while a definite and predominant moral aim would seem essential to the preacher. The artist's mind is absorbed in his own idea, and must be undisturbed by looking outwards; the preacher's is ever going out toward others to bring them into subjection to himself. One cannot, then, be at the same time the artist and the preacher; but there seems no reason why an artist should not also be a preacher, although the sermon will not be a work of art. If the author of the *Paradise Lost* could also write the *Christian Doctrine*, and unequalled political tracts, and if our general principle be true, that the poet is capable of effective social action, why should he not also be able to preach effectively? We see no reason to the contrary, unless in those rare cases where the active moral energy is so vast and constant, as not to leave to the mind the repose essential to the composition of a work of art, or perhaps even to the cultivation of the poetical faculty.

With reference to the distinction between the prophet and the poet, Mr. Carlyle observes: "The *vates* prophet, we might say, has seized that sacred mystery, (the 'open secret,') rather on the moral side, as good and evil, duty and prohibition; the

vates poet on what the Germans call the æsthetic side, as beautiful, and the like. The one we may call a revealer of what we are to do, the other of what we are to love. But, indeed, these two provinces run into one another, and cannot be disjoined. The prophet too has his eye on what we are to love: how else shall we know what we are to do? The highest voice ever heard on this earth said withal, 'Consider the lilies of the field; they toil not, neither do they spin: yet Solomon in all his glory was not arrayed like one of these.' A glance, that, into the deepest deep of beauty. 'The lilies of the field,'—dressed finer than earthly princes, springing up there in the humble furrow-field; a beautiful *eye* looking out on you, from the great inner sea of beauty! How could the rude earth make these, if her essence, rugged as she looks and is, were not inwardly beauty? In this point of view, too, a saying of Goethe's which has staggered several may have a meaning, 'The beautiful,' he intimates, 'is higher than the good; the beautiful includes in it the good.' The true beautiful, which, however, I have said somewhere, 'differs from the *false*, as Heaven does from Vauxhall!' So much for the distinction and identity of poet and prophet."—*Heroes and Hero Worship*, pp. 127, 128.

In asserting the connexion between poetry and preaching, it never can have been supposed our purpose to include that gift among the necessary qualifications of one whose function admits of forms of fulfilment so indefinitely varied as does the preacher's. Assuming that, for the most part, the preacher can only be a herald, proclaiming a message of infinite grace; or a teacher, distributing to others the fruits of his own observation, study, reflection; or a witness, testifying of the elevating or renewing power of the Truth; and will in vain attempt to be a prophet, authoritatively interpreting the present, or announcing the future; still, even for the most unpoetical of men, there may be found here a sphere of labour with abundant profit. He may discourse of Christian Ethics, Dogmatical Theology, Biblical History and Criticism, or of whatever else he may happen to have more knowledge of than his hearers; or doing none of all these particularly, he may somehow or other let the spirit that is in him express itself, and confirm faith by sympathy.

It may be necessary here to say a few words on the relation of the preacher to the actor, inquiring how far histrionic art is admissible into the pulpit. We understand by the actor one who has so great an intellectual susceptibility of being impressed by the embodied thoughts of the poet, combined with unusual powers of speech and gesture, as to be able, more or less adequately, to represent in action what the poet has expressed in words. The actor is thus the exponent not of his own but of

another's mind, to which he has for the time lent his rare gifts of utterance ; and, according to the highest view of the preacher's office, there is thus a distinct contrast between the two. The preacher says, " Because I believe, therefore have I spoken ;" the actor says, " I have spoken because I have conceived."

At the same time, it will appear, we think, to the calm and thoughtful observer, that a great part of our actual preaching partakes largely of the histrionic character. The preacher, having for the time become saturated with the thoughts and words of some portion of Holy Writ, in which either an actual historical or an ideal character is portrayed, under the influence of such temporary possession utters his feelings with all the energy, although not always with the cultivated taste of the actor. It may perhaps be said, too, that the more the preacher is under the immediate influence of the Book, the more fully will this effect be produced ; while, on the other hand, the more he has digested and incorporated into his own spiritual being its nutritious contents, the less will his discourse resemble the actor's. What has been said may suggest an explanation of a phenomenon which has sometimes perplexed us, and possibly also some of our readers ; according to which we may have heard sermon after sermon, on all manner of subjects, by some preacher of much intellectual and physical vigour, each of the sermons apparently produced under a strong influence, very like that of specific belief, and yet the result of the whole has been to leave us in extreme uncertainty as to the actual personal convictions of the preacher on almost any one of the topics of his discourses. It may be thought superfluous to remark, that in so far as any preacher's power depends on this imitative art, a comparison of his sermons with his life is altogether out of the question.

To conclude these general reflections, let us attempt in a single sentence to indicate what, according to our view, will be the characteristics of a dramatic poet's sermons. We should look for the expression of an intense feeling of the awful ceaseless struggle of Good with Evil, soothed by the hope (for if quite hopeless why should he labour ?) of the ultimate triumph of Good, of which we find some imperfect expression in these beautiful lines :—

“ Oh, yet we trust that somehow good
Will be the final goal of ill,
To pangs of nature, sins of will,
Defects of doubt, and taints of blood.

“ That nothing walks with aimless feet ;
That not one life shall be destroy'd,
Or cast as rubbish in the void,
When God hath made the pile complete.

“ That not a worm is cloven in vain ;
 That not a moth with vain desire
 Is shrivell'd in a fruitless fire,
 Or but subserves another's gain.”

The persons of whom he is called to speak we should expect to be, not cold lifeless abstractions, but all full of human passions, and represented as men of like nature, and exposed substantially to the same struggles with ourselves, placed among circumstances often widely different from ours ; while the poet's imaginative insight into these circumstances will shed a strong light upon far off periods of history, into the spirit and life of which it will be given to him to see deeper than others. At the same time, it will hardly be possible for him to fall into the vulgar error, of supposing that the primeval or ancient men were in their habits, beliefs, and life, precisely what we are, or in so far as they differed from us were simply wrong ; for he will be able to represent them in the fulness of their vitality only by filling in the details in perfect harmony with the slender outlines which remain to us of their history. The oldest themes will thus teem for us with fresh germinant thoughts ; as, when the master's hand has cleared away the accumulated remains of unproductive decayed vegetation, and exposed to the sun the fertile earth and latent seeds, we see an unlooked-for and nourishing verdure. What has been said with reference to the sacred prophetic writings, has, in truth, a much wider application. “ Often the commentator is bringing a most prosaic mind to the consideration of the sublimest poetry. ‘ How can two walk together except they be agreed ?’ and no book can be well understood unless it be read in somewhat of the same spirit in which it was written. ‘ The Apocalypse of Saint John,’ says Milton, ‘ is the majestic image of a high and stately tragedy, shutting up and intermingling her solemn scenes and acts with a sevenfold chorus of hallelujahs and symphonies ;’ and though this is being over imaginative, yet Milton is much nearer in spirit to the Divine original than many that have presumed to handle the subject, altogether devoid of the sacred glow which would have conducted them along the footprints of the Apostle John. Instead of perceiving that the prophecies were written in the free and flowing outlines of poetry, they have gone on spelling figure after figure, as if they were slowly deciphering the hieroglyphics of some Egyptian temple.”*

The sympathy here referred to as necessary we may expect in a poet ; and the importance of it is probably far greater than is

* The Structure of Prophecy, by James Douglas of Cavers. 1850.

usually supposed. What lengths of utter materialism it is possible for commentators to reach, by the rejection of all that is spiritual and supersensuous as contranatural and incredible, may be seen in such writers as Paulus; while, on the other hand, the poet, whose dwelling has ever been figured to be on some Parnassus, or other heavenly mount, seems most at home when standing on the finite and visible he is reaching out into the invisible and the infinite.

The little volume of sermons which has given occasion to these observations, is, in several respects, one of the most remarkable we have met with for a long time. It will be found to possess the merits which by anticipation, in virtue of its parentage, we have ascribed to it, with other merits of a high order. Discarding utterly the tasteless conventional pulpit phraseology, which with us is only not universal, and has the unhappy effect of either obscuring thought or concealing the want of it; with a deep sense of the reality and awful import of the things about which he has to speak, and not forgetting that if he would speak with effect he must use terms within the comprehension of the humble and not over-intelligent Hampshire rustics, forming the bulk of his audience, Mr. Kingsley has been able to express Christian thoughts, which the highest will not find unworthy of notice, in the simplest, homeliest language; which is so predominantly Saxon, that in whole pages one could hardly find a few dozen words of Latin origin.

The titles of some of these sermons are suggestive. Such headings as "God's World," "Religion not Godliness," "Hell on Earth," "Association," "On Books," shew that the writer aims at something more than playing round a text. He grapples indeed very boldly with subjects, and with subjects of immediate practical interest, extorting a blessing often from the most unpromising; fighting not against "extinct Satans," but against the actual existing Satans, the terrible enough evils which are now at work all around us. Not content with the mere amplification of the words of Scripture, applicable immediately to a different social state, and to forms of evil different from the present, the author's endeavour is rather to dive into the heart of the Scripture text, and become possessed of its very life and spirit, which is for all time and for all circumstances. One of his great objects is to undo that huge work of an unbelieving age, through which the Idea of Nature has been disjoined from the Idea of God, for whom, in this relation, has been substituted some dim notion of a changeless self-subsisting law, so that the earth we tread on is hardly recognised as in very truth God's world. But we shall not here enter upon any examination of the theology which is taught (implicitly, for all technical theological terms, and the inculcation of

any theological system are studiously avoided) in this work, having introduced it to our readers for a different purpose ; and now leaving them to judge of its spirit from the extracts which follow, we recommend the little volume to them in some of their thoughtful hours, as a remarkable phenomenon in the department of literature to which it belongs.

“ RELIGION NOT GODLINESS.

“ Did you ever remark, my friends, that the Bible says hardly anything about religion—that it never praises religious people. This is very curious. Would to God we would all remember it! The Bible speaks of a religious man only once, and of religion only twice, except where it speaks of the Jews’ religion to condemn it, and shews what an empty, blind, useless thing it was. What does the Bible talk of, then? It talks of God—not of religion, but of God. It tells us not to be religious but to be godly. . . . And yet I believe we ought to think of it, and, by God’s help, I will one day preach you a sermon, asking you all round this fair question :—If Jesus Christ came to you in the shape of a poor man, whom nobody knew, should *you* know him—should you admire him, fall at his feet and give yourself up to him, body and soul? I am afraid that I for one should not. I am afraid that too many of us here would not. That comes of us thinking more of religion than we do of godliness—in plain words, more of our own souls than we do of Jesus Christ. But you will want to know what is, after all, the difference between religion and godliness? Just the difference, my friends, that there is between always thinking of self and always forgetting self—between the terror of a slave and the affection of a child—between the fear of hell and the love of God. For, tell me, what you mean by being religious? Do you not mean, thinking a great deal about your own souls, and praying and reading about your own souls, and trying by all possible means to get your own souls saved? Is not that the meaning of religion? and yet I have never mentioned God’s name in describing it! This sort of religion must have very little to do with God. . . . Yes, indeed, what would heaven be worth without God? But how many people feel that the curse of this day is that most people have forgotten *that*? They are selfishly anxious enough about their own souls, but they have forgotten God. They are religious for fear of hell, but they are not godly, for they do not love God, or see God’s hand in everything. They forget that they have a Father in heaven; that He sends rain and sunshine, and fruitful seasons; that He gives them all things richly to enjoy in spite of all their sins. His mercies are far above, out of their sight, and therefore His judgments are far away out of their sight too, and so they talk of the ‘Visitation of God,’ as if it was something very extraordinary, and happened very seldom, and when it came only brought evil, and harm, and sorrow. If a man lives on in health, they say he lives by the strength of his own constitution; if he drops down dead, they say he died by ‘the visitation of God.’ If the corn

crops go on all right and safe, they think *that* quite natural—the effect of the soil, and the weather, and their own skill in farming and gardening. But if there comes a hailstorm or a blight, and spoils it all, and brings on a famine, they call it at once ‘a visitation of God.’ My friends, do you think God ‘visits’ the earth or you only to harm you? I tell you, that every blade of grass grows by the ‘visitation of God.’ I tell you, that every healthy breath you ever drew, every cheerful hour you ever spent, every good crop you ever housed safely, came to you by ‘the visitation of God.’ I tell you, that every sensible thought or plan that ever came into your heads—every loving, honest, manly, womanly feeling that ever rose in your hearts, God ‘visited’ you to put it there. If God’s Spirit had not given it you, you would never have got it of yourselves.”—Pp. 13-18.

“LIFE AND DEATH.

“The text tells us that he gives life, not only to us who have immortal souls, but to everything on the face of the earth; for the psalm has been talking all through not only of men but of beasts, fishes, trees, and rivers, and rocks, sun and moon. Now all these things have a life in them. Not a life like ours; but still you speak rightly and wisely when you say, ‘That tree is alive, and that tree is dead. That running water is live water—it is sweet and fresh; but if it is kept standing it begins to putrefy, its life is gone from it, and a sort of death comes over it, and makes it foul and unwholesome, and unfit to drink.’ This is a deep matter, this, how there is a sort of life in everything, even to the stones under our feet. I do not mean, of course, that stones can think as our life makes us do, or feel as the beasts’ life makes them do, or even grow as the trees’ life makes them do; but I mean that their life keeps them as they are, without changing or decaying. You hear miners and quarrymen talk very truly of the live rock. That stone, they say, was cut out of the live rock, meaning the rock as it is under ground, sound and hard—as it would be, for aught we know, to the end of time, unless it was taken out of the ground, out of the place where God’s Spirit meant it to be, and brought up to the open air and the rain, in which it is not its nature to be; and then you will see that the life of the stone begins to pass from it bit by bit, that it crumbles and peels away, and in short decays, and is turned again to its dust. Its organization, as it is called, or life ends, and then—what? does the stone lie for ever useless? No! And there is the great blessed mystery of how God’s Spirit is always bringing life out of death. When the stone is decayed and crumbled down to dust and clay, it makes *soil*. This very soil here, which you plough, is the decayed ruins of ancient hills; the clay which you dig up in the fields was once part of some slate or granite mountains, which were worn away by weather and water, that they might become fruitful earth. Wonderful! but any one who has studied these things can tell you they are true. Any one who has ever lived in mountainous countries ought to have seen the thing happen—ought to know that

the land in the mountain valleys is made at first, and kept rich year by year by the washings from the hills above ; and this is the reason why land left dry by rivers and by the sea is generally so rich. Then what becomes of the soil ? It begins a new life. The roots of the plants take it up ; the salts which they find in it—the staple, as we call them—go to make leaves and seed ; the very sand has its use—it feeds the stalks of corn and grass, and makes them stiff. The corn stalks would never stand upright if they could not get sand from the soil. So what a thousand years ago made part of a mountain, now makes part of a wheat plant ; and in a year more the wheat grain will have been eaten, and the wheat straw perhaps eaten too, and they will have *died*—decayed in the bodies of the animals who have eaten them, and then they will begin a third new life—they will be turned into parts of the animal's body—of a man's body. So what is now your bone and flesh may have been once a rock on some hill-side a hundred miles away."

The "Sermon" mentioned last at the head of this paper, which has reached us as we are going to press, and which has already gained some notoriety from the circumstances attending its delivery, relates to questions too delicate and difficult to be even referred to in the close of an Article. To enter upon any consideration of its doctrine or objects is obviously foreign to our present purpose ; and having chronicled the fact of its publication, we must now take leave of Mr. Kingsley.

ART. VII.—*The Stones of Venice. Volume the First.—The Foundations.* By JOHN RUSKIN. London, 1851.

IN our Number for February 1850, we entered into a somewhat elaborate and novel investigation of the sources of appropriate character in the Egyptian and Greek Architectures, and we referred our readers for the only similar investigation of the Northern Gothic style, to an essay in another Journal. We stated and gave ample reasons for our belief that these three styles rank in the scale of integrity and merit conspicuously above all others. In this Article we shall carry on the task which we then commenced, by examining, with as little technicality as possible, the chief of the secondary and derived styles: and in doing this, we hope to arrive at useful practical results with regard to modern civil architecture, which, although it cannot be called a style, being an imitation of many styles, is yet sufficiently pretentious and expensive to justify a serious consideration of its defects and prospects.

We must set out by quoting our own words from the above-mentioned Article. "If to the mind's eye we recall the various kinds of architecture that from the beginning have arisen, we shall remark three kinds which, in a peculiar manner, stand out from and above the rest. It is almost needless to name the architectures of Egypt, Greece, and Christian Europe, in the middle ages, as constituting this conspicuous triad. These architectures are distinguished from all others by a simplicity, definiteness, dignity, and appropriateness of effect, resulting from the general subordination in each style, not only of decoration, but of total form, to a particular thought or sentiment, intimately allied with and strongly suggestive of the character of the religion to which it is applied. The leading expressions of the three architectures are, moreover, very strikingly and simply related. . . . The total forms become expressive, and even religiously symbolical, by a striking, and, in each case, a quite peculiar relativeness to the great law of gravitation. In fewest words, the general forms of Egyptian architecture are those of simple weight, and they express gloomy and everlasting material duration; those of Greek architecture convey the notion of weight competently supported, and are expressive of secure, conscious, and well-ordered power; finally, the prevailing forms of Gothic architecture shew weight annihilated—spire and tower, buttress, clerestory, and pinnacle, rise to heaven, and indicate the spirituality of the worship to which they are applied."

There are two other kinds of architecture, and only two, which

under a different denomination,) such projections or knots as did not exceed their own diameter, and appeared fitter for the purpose of steadying the useless pillar, than the pillar for that of carrying an unmeaning entablature. The effect produced was that of a second capital, mimicking the first; confusing its form and destroying its appearance; causing as great a multiplication of breaks and angles and of clumsy mouldings, as arises from the equally useless pedestal underneath." In other cases, column and entablature were included by independent arches, "so that the column carrying the entablature, but the entablature carrying nothing, the former only appeared for the purpose of supporting the latter, and the latter for that of tying together the former." The climax of the mal-appropriation of the column was its isolated employment as a high perch for a statue, while all its details and decorations retained a reference to the heavy entablature, as their origin and justification, and the main condition of their beauty. The misapplication of the column of course brought on a proportionate degradation of its form. Vague and arbitrary notions of symmetry, simplicity, variety, &c., took the place of a steady and intelligible reference to the powers of gravitation and support. The Doric shaft owed its effect of enormous and active might chiefly to the flutes, and to the fact that it sprang at once from the ground, without any preparations of base or independent plynth. The "Roman Doric" was a dead cylindrical lump, resting on a plynth surmounted by a base consisting of one great roll-moulding, that looked as if it had been formed from a mass of yielding matter by the pressure of the inanimate shaft. The Greek shaft, whether Doric or Ionic, never expressed its own weight, but confined itself to foretelling and manifestly preparing to meet that of the entablature. The capital of the column was the first point at which sufferance from weight was declared. Here the Doric and "Attic Ionic" architects shewed surprising skill and sensibility. Curves of great active force—always conic sections—were chosen for the outlines of the great feature of the Doric capital, the "ovolo." For these curves, the Romans substituted the insignificant quarter-circle, which expressed just nothing at all but want of skill to draw any other curve, or, at best, a childish and vain attempt to improve the shaft by "harmonizing" it with the semicircular forms of the new construction. The Greek Ionic capital is a powerful, though perhaps unjustifiable, representation of elasticity. The Ionic volutes would be formed by the pressure of the entablature upon a coach-spring, of which the two bars should be equal in length but unequal in strength, the lower bar being much more powerful in the middle than the upper bar, whose elasticity should be uniform. It seems to us that this suggestion of self-formation was intended to

lintel. This was the constructive principle of the wooden hut, from which the stone temple was, beyond all question, directly derived; and this continued to be the constructive principle as well as the external form of the Greek temple to the last. Every member of Greek architecture, although so selected and modified as to form a part of a wonderfully elaborate and perfect expression of balanced power of support and gravitation, was referable to its constructive antitype; and the artistic excellence of every detail was so far dependent upon this system of construction, that, although the forms might remain under different constructive conditions, they could remain only as a beautiful body remains when the life is gone,—their beauty producing a revolting sense of anomaly and falsehood, and doomed to further corruption and utter dissolution. The Romans, upon the discovery of the marvellous capacities of the arch, very rightly abandoned the Greek constructive system; but they most ignorantly retained, as far as possible, the Greek forms. In Greek architecture the column was the principal supporting member, the wall officiating chiefly as a mere veil to the interior: hence the column had a right to the position and decorations which made it the most conspicuous feature of the building. The Roman arched roof required a continuous wall of great power for its support, and columns, except in the case of an advanced porch, like that which faces the Pantheon, became superfluous. They continued, however, to be used as plentifully as if they had been as useful as ever; and their conspicuousness was increased rather than diminished by the addition of pedestals and by the new method of treatment which was called for by the mere fact of their comparative inutility. “Frequently,” says Mr. Hope, “as in the triumphal arches of the Emperors, the pedestal became so lofty, that, instead of raising the columns on a sort of cothurnus, it lifted them on a positive stilt, and not only cut off their connexion with the ground, but made them appear as if tottering in the air. Where the pedestal occupied a greater space between the soffit and the stylobate, less remained for the column, which became shorter, thinner, weaker, *requiring instead of affording support*; its apparent weakness exceeding its real debility, like an appendage not wrought for the building, but borrowed from some smaller structure, and only carried to the requisite height by the aid of materials which did not belong to it. As they became weaker, like the limbs of an unhealthy child, they were stretched to a greater distance from each other, and were no longer capable of bearing an entablature diminished to their own proportions. In order fully to confirm their inutility, they were not made to carry any such, but of an architrave directly supported by the wall itself, (a continuation of that wall indeed,

under a different denomination,) such projections or knots as did not exceed their own diameter, and appeared fitter for the purpose of steadying the useless pillar, than the pillar for that of carrying an unmeaning entablature. The effect produced was that of a second capital, mimicking the first; confusing its form and destroying its appearance; causing as great a multiplication of breaks and angles and of clumsy mouldings, as arises from the equally useless pedestal underneath." In other cases, column and entablature were included by independent arches, "so that the column carrying the entablature, but the entablature carrying nothing, the former only appeared for the purpose of supporting the latter, and the latter for that of tying together the former." The climax of the mal-appropriation of the column was its isolated employment as a high perch for a statue, while all its details and decorations retained a reference to the heavy entablature, as their origin and justification, and the main condition of their beauty. The misapplication of the column of course brought on a proportionate degradation of its form. Vague and arbitrary notions of symmetry, simplicity, variety, &c., took the place of a steady and intelligible reference to the powers of gravitation and support. The Doric shaft owed its effect of enormous and active might chiefly to the flutes, and to the fact that it sprang at once from the ground, without any preparations of base or independent plynth. The "Roman Doric" was a dead cylindrical lump, resting on a plynth surmounted by a base consisting of one great roll-moulding, that looked as if it had been formed from a mass of yielding matter by the pressure of the inanimate shaft. The Greek shaft, whether Doric or Ionic, never expressed its own weight, but confined itself to foretelling and manifestly preparing to meet that of the entablature. The capital of the column was the first point at which sufferance from weight was declared. Here the Doric and "Attic Ionic" architects shewed surprising skill and sensibility. Curves of great active force—always conic sections—were chosen for the outlines of the great feature of the Doric capital, the "ovolo." For these curves, the Romans substituted the insignificant quarter-circle, which expressed just nothing at all but want of skill to draw any other curve, or, at best, a childish and vain attempt to improve the shaft by "harmonizing" it with the semicircular forms of the new construction. The Greek Ionic capital is a powerful, though perhaps unjustifiable, representation of elasticity. The Ionic volutes would be formed by the pressure of the entablature upon a coach-spring, of which the two bars should be equal in length but unequal in strength, the lower bar being much more powerful in the middle than the upper bar, whose elasticity should be uniform. It seems to us that this suggestion of self-formation was intended to

be conveyed by the Ionic capital : if it was not so, we do not know how this member can be defended against Mr. Ruskin's charge of being an "exceedingly base" invention; but if it was so, we cannot speak with any high praise of an expression, in stone, of a quality which it is manifestly impossible that stone itself should ever exhibit. How far the subtlety and quick perception of the Greeks may have pierced the obscurity which this inconsistency produces, in the Ionic capital, or how far the *abstract* effect, which was conferred upon form by the system of polychrome painting, may have concealed that inconsistency, we cannot estimate. But taking the Greek Ionic capital at the worst, as being obscure and inconsistent in meaning, it is vastly better than the Roman Ionic, of which the no-meaning was very distinctly pronounced by the character of its curves. In Greek Doric the abacus had a very important office as the member which separated the two great classes of supporting and supported members. It was a simple square-cut slab, and afforded the point of perfect repose, around which all other details grouped themselves in harmonious relation. The senseless Roman architects turned this beautiful figure into an actively supporting member, by crowning it with a moulding expressive of resistance to weight : but probably these persons had not the merit of intending even as much as this by their alteration ; for they seem to have considered the Greek mouldings as arbitrary decorations, which might be applied, without distinction, wherever it seemed desirable, to ornament a fillet, or to terminate a blank space with a pretty edging. When we arrive at the entablature, we find similar faults from the same causes. The Greek triglyph, in the frieze, represented the notched ends of the beams which stretched from architrave to architrave, and formed the foundation of the flat roof. The roof became arched, and these triglyphs lost their constructive significance, and ought to have ceased altogether. But they were superstitiously retained ; and, not only so, but they were made to seem more dependent than ever upon their departed meaning, by being placed rigidly over the centre of every shaft ; whereas the Greeks partially violated the constructive meaning of the triglyphs in favour of a higher artistic value, by binding the corner of the frieze with a pair of them, and so shifting them and those that were next to them out of their right constructive position over the supporting shafts. Equally little regard to the original sense was paid to the other details of the entablature, and the entablature itself lost its organic character by the loss of the originally distinct nature of its three members—the architrave, frieze, and cornice. The Romans failed most remarkably in the point about which they made the greatest ostentation of science, namely, proportion.

They shackled their practice by an elaborate code of arbitrary rules, none of which were ever dreamt of by the Greeks, whom they professed to follow ; and, at the same time, they forgot the living centre of reference, which was the source of the exquisite Doric proportional system, namely, the simple mass of the architrave,* the *relative* breadth of which was increased or diminished in proportion to the degree of power to be expressed. “But,” writes Mr. Hope, “of all the parts borrowed from Grecian architecture, that which came to be applied as the way most different from, most inconsistent with its nature and distinction in the original, was the fastigium, the part which we call the pediment. That pediment, which was only the termination of a roof, slanting both ways from its central line or spine, of which, throughout its whole length from end to end,” (except in hypæthral temples,) “the continuity was never broken, which was never seen in Grecian buildings except on the straight line at the summit, and the gable formed by the extremity of the roof, in Roman architecture frequently appeared as if cut off from all that belonged to it, and grew out of, or was stuck under, the entablature which it should have surmounted, against the upright wall, over a door, a window, or a niche, even, as in the Temple of Balbeck, placed within a projecting portico—a situation in which it could not be useful even to carry off the wet. Instead of a single, large, and majestic pediment, naturally and magnificently terminating the building, several rows were sometimes seen of these small and inappropriate triangles ; and, to complete the inconsistency, they were rendered as unnatural in form as in situation. They were sometimes rounded, sometimes broken, sometimes squeezed within others of larger, sometimes strung round others of smaller dimensions.” The grossness of the Roman taste was, however, even more conspicuous in their decorative “improvements” and inventions than in their misunderstanding of what had been invented before them. They “improved” the Doric shaft by substituting for the exquisite horizontal neck-channels—for an account of which we refer our readers to our former Essay—a projecting band or “astragal,” which, instead of proving the sufficiency of the shaft to do its work, by taking away from its power where power was most needed, seemed to indicate that the shaft required strengthening at that point ; and in their stupid devo-

* See *North British Review* for February 1850, pp. 334, 335. We must refer those of our readers who wish to make a study of the subject in hand to the above Number of this Review : it is not possible fully to describe the extent of the Roman abuse of Greek forms without repeating much that was there said. Whenever, in the present Article, a principle in Greek architecture is assumed, it is because it has already been proved in the foregoing Essay.

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der the treatment of such men as the Caracci. Gods without power, satyrs without rusticity, nymphs without innocence, men without humanity, gather into idiot groups upon the polluted canvass, and scenic affectations encumber the streets with preposterous marble. Lower and lower declines the level of abused intellect; the base school of landscape gradually usurps the place of historical painting, which had sunk into prurient pedantry; the Alsatian sublimities of Salvator, the confectionary idealities of Claude, the dull manufacture of Gaspard and Canaletto, south of the Alps; and on the north, the patient devotion of besotted lives to the delineation of bricks and fogs, fat cattle and ditch water. And thus Christianity and morality, courage and intellect, and art, all crumbling together into one wreck, we are hurried on to the fall of Italy, the revolution in France, and the condition of art in England (saved by her Protestantism from severer penalty) in the time of George II."

The architecture of the Renaissance is regarded by Mr. Ruskin as the most baleful of all the developments of Renaissance art :—

"The harm which has been done by Claude and the Poussins is as nothing when compared to the mischief effected by Palladio, Scamozzi, and Sansovino. Claude and the Poussins were weak men, and have had no serious influence on the general mind. There is little harm in their works being purchased at high prices; their real influence is very slight, and they may be left without grave indignation to their poor mission of furnishing drawing-rooms and assisting stranded conversation. Not so the Renaissance architecture. Raised at once into all the magnificence of which it was capable by Michael Angelo, then taken up by men of real intellect and imagination, such as Scamozzi, Sansovino, Inigo Jones, and Wren, it is impossible to estimate the extent of its influence on the European mind, and that the more because few persons are concerned with painting, and of those few the larger number regard it with slight attention; but all men are concerned with architecture, and have at some time of their lives serious business with it. It does not much matter that an individual loses two or three hundred pounds in buying a bad picture, but it is to be regretted that a nation should lose two or three hundred thousand in raising a ridiculous building. Nor is it merely wasted wealth and distempered conception which we have to regret in this Renaissance architecture; but we shall find in it partly the root and partly the expression of certain dominant evils of modern times—over-sophistication and ignorant classicalism; the one destroying the healthfulness of general society, the other rendering our schools and universities useless to a large number of the men who pass through them."

We have quoted these passages because they contain much just thought excellently well put, and because we think that they

tion to mechanical symmetry they made the slanting and horizontal cornices of the Doric order all alike, by introducing the dentils—representative of rafter ends—into the former, where rafters could not possibly occur. The Romans never seemed to have caught a glimpse of the possibility of inventing a system of decoration appropriate to their splendid discovery of the mechanical virtues of the arch. Where it interfered with Greek forms, they absolutely hid it away, instead of decorating and boasting of it; the horizontal entablature in Roman architecture being sometimes nothing more than a *mask* to a mass of *arched* construction.

It is not necessary that we should further describe the dull stupidities and senseless flippancies of Roman architecture. We have traced them thus far, however, in order that the reader may be fully prepared to understand the grounds upon which the architects of the Renaissance in Italy began their work. They were altogether ignorant of pure Greek architecture, and, by a superstition easy to account for, though not, therefore, altogether to be excused, they set out with an unquestioning faith in the plenary architectural inspiration of the Roman builders and of their critic Vitruvius. There had always been in Italy a hankering after heathenism, which had been kept for a thousand years in abeyance, but never quite destroyed, by Christianity and the influence of northern and eastern mind. Before the rise of the Renaissance school of art, the very soul of Christianity in Italy had been blasted and abolished by the corruptions of the Papacy. Mr. Ruskin eloquently and truly writes :—

“ Against the corrupted Papacy arose two great divisions of adversaries—Protestants in Germany and England; Rationalists in France and Italy: the one requiring the purification of religion, the other its destruction. The Protestant kept the religion, but cast aside the heresies of Rome, and with them her arts, by which last rejection he injured his own character, cramped his intellect by refusing it one of its noblest exercises, and materially diminished his influence. It may be a serious question how far the pausing of the Reformation has been a consequence of this error. The Rationalist kept the arts and cast aside the religion. This Rationalistic art is the art commonly called Renaissance, marked by a return to Pagan systems, not to adopt them and hallow them for Christianity, but to rank itself under them as an imitator and pupil. In painting it is headed by Giulio Romano and Nicholas Poussin; in architecture by Sansovino and Palladio. Instant degradation followed in every direction; a flood of folly and hypocrisy. Mythologies ill understood at first, then perverted into feeble sensualities, take the place of the representations of Christian subjects, which had become blasphemous un-

der the treatment of such men as the Caracci. Gods without power, satyrs without rusticity, nymphs without innocence, men without humanity, gather into idiot groups upon the polluted canvass, and scenic affectations encumber the streets with preposterous marble. Lower and lower declines the level of abused intellect; the base school of landscape gradually usurps the place of historical painting, which had sunk into prurient pedantry; the Alsatian sublimities of Salvator, the confectionary idealities of Claude, the dull manufacture of Gaspard and Canaletto, south of the Alps; and on the north, the patient devotion of besotted lives to the delineation of bricks and fogs, fat cattle and ditch water. And thus Christianity and morality, courage and intellect, and art, all crumbling together into one wreck, we are hurried on to the fall of Italy, the revolution in France, and the condition of art in England (saved by her Protestantism from severer penalty) in the time of George II."

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"The harm which has been done by Claude and the Poussins is as nothing when compared to the mischief effected by Palladio, Scamozzi, and Sansovino. Claude and the Poussins were weak men, and have had no serious influence on the general mind. There is little harm in their works being purchased at high prices; their real influence is very slight, and they may be left without grave indignation to their poor mission of furnishing drawing-rooms and assisting stranded conversation. Not so the Renaissance architecture. Raised at once into all the magnificence of which it was capable by Michael Angelo, then taken up by men of real intellect and imagination, such as Scamozzi, Sansovino, Inigo Jones, and Wren, it is impossible to estimate the extent of its influence on the European mind, and that the more because few persons are concerned with painting, and of those few the larger number regard it with slight attention; but all men are concerned with architecture, and have at some time of their lives serious business with it. It does not much matter that an individual loses two or three hundred pounds in buying a bad picture, but it is to be regretted that a nation should lose two or three hundred thousand in raising a ridiculous building. Nor is it merely wasted wealth and distempered conception which we have to regret in this Renaissance architecture; but we shall find in it partly the root and partly the expression of certain dominant evils of modern times—over-sophistication and ignorant classicalism; the one destroying the healthfulness of general society, the other rendering our schools and universities useless to a large number of the men who pass through them."

We have quoted these passages because they contain much just thought excellently well put, and because we think that they

also contain a certain injustice, the statement and correction of which will provide us with some considerations essential to a right understanding of Renaissance art in general, and of Renaissance architecture in particular. We have so much respect for Mr. Ruskin's artistic perception and cultivation, that we have had considerable hesitation in coming to any conclusion in direct contradiction of any conclusion of his: but we are compelled to say, that after having carefully read all that he has published, we can still retain a high degree of admiration and even of love, for works of art which he condemns, if we mistake not, as being wholly wrong and worthless. We do not feel qualified to speak technically of painting, but we have received a degree and kind of delight from the works of Claude and Nicholas Poussin, which we are deeply persuaded could never have been produced in us by pictures deserving the amount of censure which is heaped upon them by Mr. Ruskin. We acknowledge fully the surprising truthfulness of the painters of our own day, whom Mr. Ruskin has so eloquently defended. But let us take a picture by Millais or Holman Hunt—painters whose truthfulness Mr. Ruskin in his Letters to the "Times," rightly asserts to have been unequalled since the days of Albert Durer—and compare the feeling we receive from it with that which we receive from an unprejudiced contemplation of one by Claude or Poussin. Though actual outward nature is painted by the former with the most faithful conscience in every detail, and, violated by the latter in lesser matters without remorse, yet *the feeling which those who are susceptibly constituted receive from nature*, seems to us to have been far more frequently and successfully expressed by the last than by the first. We would not for an instant under-rate the extraordinary powers of the painters we have named; they are generally understood to be very young men; and, as such, are perfectly right in adhering for the present with the severest self-denial to their plan of copying, rather than interpreting nature. "The light that never was on sea or land," will not fail to dawn from their works as soon as they shall have fulfilled the task which they have so manfully undertaken of painting more faithfully than has yet been done, that which is to be seen by the light of common day. We must, however, confess it to be our impression, that there is more of the "vision and the faculty divine" expressed in the pictures of Claude and Poussin, in spite of all their "over-sophistication and ignorant classicalism," and neglect, or rather falsification of nature in details, than has yet been expressed by any living painter. Mr. Ruskin, in "Modern Painters," has referred a number of elementary powers of art to their direct and simple symbolization of the divine attributes. Now, unity in multitude is among the most mysterious and ad-

mirable to contemplate of all the perfections of God ; and we think that Mr. Ruskin has not given the famous painters and architects of the period in question, sufficient credit for its symbolization in their works. The moderation which results from the artificial necessity of every one of innumerable details, assuming, remembering, and working in concert with all the rest, ravishes the heart with a joy far greater than any that is to be obtained from our wretchedly imperfect means of transferring literally upon stone or canvass, the endless harmonies of nature. To this artificial necessity no merely outward knowledge and skill in art will ever enable a man to submit himself. Nothing but genius, which is a more lively impression than ordinary of the image of God upon our being, can enable a man to express this unity in multitude so as to touch the heart : but when a man has genius he can evolve this divine harmony out of the poorest materials, and can so combine things false in themselves, that they shall give utterance to this unity, which is the fundamental truth of the universe, spiritual and natural.

The architecture of the Renaissance is loaded with details, which in the hands of the Romans, who first abused them, were gross falsehoods, but which in their revival in the fifteenth century, should rather be looked upon as mere ignorance, superstition, and nonsense. What was Roman was right ; those who questioned in thought, and scorned in practice the Christian faith, would have been horribly scandalized by freethinking in matters of antiquity ; the plenary inspiration of Vitruvius was an article of the Renaissance creed ; and the hideous barbarisms of the out-worn and perverted civilisation of ancient Rome, were looked upon as constituents of a golden age of art, which it would be presumptuous to think of equalling, much less amending. If the Renaissance architects sometimes invented new details, or combinations of details, it was in the humble spirit with which a translator—Pope, for example—of a famous ancient poet might venture upon adding a “grace” or two of his own, in order partly to compensate for his inability to express the perfection of the revered original. They do not seem to have had the remotest suspicion that their modified translations were often incomparably superior to the originals. The Renaissance architects, in fact, were not bold enough to be as bad as the late Roman architects,—just as our church-builders are not bold enough to be as good as the mediæval architects. There is a nightmare-ish deformity and depravity about some of the remains of late Roman work ; an air of vast, but mal-appropriated, and even fiendish power, which revolts the rightly cultivated spirit, but simply awes and intimidates into cowardly

reverence the mind which is uninformed of better things.* To this bad eminence the Renaissance architects seldom or never attained. The barbarisms which, in Roman work, were foisted upon the eye, as the first objects for attention, generally hold a subordinate and—as we have above said—harmonized position in the total work of the fifteenth century architect. It is not often that the chaotic and insane get the upper hand.

A notice of a few of the principal features of Renaissance architecture may be interesting to the reader, and will enable him to give due credit to the architects who could evolve beauty out of combinations of such materials. The most conspicuous and abominable of Renaissance barbarisms, is the system of “rustication” and “rock-work,” *so far as it is not strictly and wholly subordinated to the exhibition of masonry and the expression of power*. The wall is seldom left plain by the Renaissance builders. The junction of the stones is generally made conspicuous by cutting away their edges, or by roughing the surface, except at the edges where they join. This exhibition of the construction of the wall is a highly valuable and perfectly legitimate method of effect, though it is often greatly abused: but it is in the means by which this exhibition is made that the great barbarism of “rustication” often lies. In our opinion there are only two legitimate methods of rustication—the stones should have their edges simply chamfered or sunk from the general surface; or the faces, rough from the quarry, may be chiselled smooth at the edges; all sorts of manifestly artificial roughing of the surface, in order to obtain the smooth edge, are totally false in principle and disgusting in effect. One of the commonest of these artificial roughings is the *vermiculated*, by which the stones are made to look *worm-eaten*. Mr. Ruskin vehemently reprobates rustication altogether, but we can agree with him only in his rejection of the kind we are now speaking of. As this artificial roughing is an important point, and hitherto an almost undebated one, we will quote what Mr. Ruskin says about it:—

“We have now to notice another effort of the Renaissance architects to adorn the blank spaces of their walls by what is called Rustication. There is sometimes an obscure trace of the remains of an imitation of something organic in this kind of work. In some of the better French eighteenth century buildings, it has a distinctly floral character, with a final degradation of flamboyant leafage; and some

* Flaxman in one of his illustrations of Dante's Hell, fills up the back-ground with forms of hellish architecture which seem to us to be peculiarly fine in their place. Chaos and insanity seem to be organized in the toppling towers, the wild battlements, and the horrible bridge. The feeling, however, is not new: it is merely a development of that which is obtained in Roman works by a more than usually bold employment of some of the barbarisms described above.

of our modern English architects appear to have taken the decayed teeth of elephants for their type ; but, for the most part, it resembles nothing so much as worm casts, nor these with any precision. If it did, it would not bring it within our sphere of properly imitative ornamentation. I thought it unnecessary to warn the reader that he was not to copy forms of refuse or corruption ; and that while he might legitimately take the worm or the reptile for a subject of imitation, he was not to study the worm cast or coprolite. It is however, I believe, sometimes supposed that rustication gives an appearance of solidity to foundation stones. Not so ; at least to any one who knows the look of a hard stone. You may, by rustication, make your marble or granite look like wet slime, honey-combed by sand-eels, or half-baked tufo covered with slow exudation of stalactite, or rotten claystone coated with concretions of its own mud, but not like the stones of which the hard world is built. Do not think that nature rusticates her foundations. Smooth sheets of rock, glistening like sea waves, that ring under the hammer like a brazen bell—that is her preparation for first stories. She does rusticate sometimes ; crumbling sandstones with their ripple marks filled with red mud ; dusty limestones, which the rains wash into labyrinthine cavities ; spongy lavas, which the volcano-blast drags hither and thither in ropy coils and bubbling hollows ; these she rusticates, indeed, when she wants to make oyster-shells and magnesia of them ; but not when she needs to lay her foundations with them. Then she seeks the polished surface and iron heart, not rough looks and incoherent substance.”

The natural roughness of the stone, as it comes from the quarry, is, however, a valuable means of effect, apart from the opportunity it affords for marking the junctions by finished edges. The Renaissance palaces are almost always built in three stories—basement, middle, and attic. The middle story is devoted to the chief apartments, and is the part upon which all the splendour of the classic “orders” is lavished. The basement is carefully expressed as such, and is made to appear, as well as to be a ground and preparation for the principal portion of the edifice. Strength and comparative absence of finish are its proper expressions ; and these are legitimately obtained, the first by deeply chamfered masonry, the last, by the natural roughness of its surface.

The legitimate ends of rustication being these and these only, it is obvious that rustication can be properly employed only upon large and thick walls, or on solid masses of masonry. But the Renaissance architects, in imitation of their masters, the Romans, though they often employed rustication with admirable effect in the right places, often also lavished it in situations which converted it into unmitigated absurdity. Columns, the beauty of which, as all must feel, and as we proved in our former Article, depends almost entirely upon the uninterrupted perfection of the

outline of the shaft, were often rusticated by the Renaissance builders. Sometimes the frustra of the shaft are alternately cubical and cylindrical; sometimes they are roughed as if they had been wrought by the blows of cannon balls instead of chisels; and sometimes both kinds of enormity are perpetrated in the same shaft. The shafts of the gate of Burlington House in Piccadilly, have sheep-skins hung upon their recreant limbs; and the kind of excuse which the Renaissance architects and their followers have thought sufficient for this sort of thing, will appear from these words of Mr. Joseph Gwilt, who is a great admirer of "the orders," and of the "good old times" of Wren and Jones, in opposition to the mediæval innovations of our own days.—"*Rustics and rock-work on columns are rarely justifiable, except for the purpose of some particular picturesque effect, which demands their prominence in the scene, or street view, as in the gateway at Burlington House in Piccadilly—a splendid monument of the great talent of Lord Burlington.*" Now, notwithstanding all Mr. Gwilt's learning, and his expressed scorn of the opinions of reviewers upon architecture, we venture to suggest that the same principle which he alleges in defence of the Burlington sheep-skins, would justify a lady, if she was fond of attracting attention, and could not do so otherwise, in standing upon her head in a ball-room. We fully allow, and it is our present purpose to attribute to this manner of architecture, the merit of evolving good out of evil; but far be it from us to say, that the architects of this school are therefore justified in doing the evil. A lie is a lie, though it be the cause of great immediate convenience or pleasure; a ballet-girl is a ballet-girl, though a whole opera-house of highly proper people receive delight from that which is at once her grace and disgrace; and the Renaissance architecture, in many of its details and principles, is a shameful perversion of the truth of art, none the less because we can enjoy its unity and beauty of combination, *so long as we can continue to forget its fundamental falsehood.* And let us remind those who would advocate the continuance of this style for civil architecture, that it will become every day more and more impossible that this condition of the enjoyment of Renaissance architecture should be rightly fulfilled by the people. So long as pure Greek architecture was to be found only in Greece, and in Stuart and Revett, the requisite ignorance of architectural truth might continue to flourish among the people. But now that, in their daily avocations, they pass before such buildings as Inwood's exquisite restoration of the Erectheum in Euston Square, the New British Museum, and the Post-Office; and that every tenth doorway of the new private houses about London exhibits, however ill-placed, the purest Greek forms, it must inevitably come to

pass that a feeling will be slowly formed which will be revolted by the degenerated types of those forms everywhere abounding in the style in question ; and that such buildings as the New Club House in St. James's Square, will have all their general effects of unity and harmony swamped, in a consciousness of the want of truth in detail. It seems to us to be quite an unaccountable thing, that an architect capable of the merits of the building just mentioned, and instructed in the pure styles, should also be capable of tolerating its faults, which, however, are not his, but those of the Renaissance manner. Let us consider the falsehoods merely of rustication and rock-work which are apparent in this building, and for any one of which, no doubt, the architect can allege unquestionable authority. In the first place, the low podium or basement, which rises from the pavement, is rock worked in two distinct bands, one above the other ; the bands are separated by a smooth surface, having no object besides their separation ; the reason of that separation itself is a totally unmeaning difference in the kind of rock-work in the two bands, one being worm-eaten much deeper than the other. The little balustrades which surmount this podium are again worm-eaten with elaborate art, and in each case the worm-eaten surfaces are sunk below their frame-work of the smoothed stone, instead of rising from it, as they must have done, had they been produced by any conceivable natural process. Again, the pairs of shafts between the windows are, as shafts, literally overwhelmed and lost, at the first glance, by the alternate projections and recessions of their mass. Their frustra, however, are *all* cylindrical, which is a step beyond the barbarism of shafts, formed by alternate cylinders and cubes ; for in these we are at liberty to fancy that the mason had not time to cut out the pure shaft, so left every other block untouched, to be wrought into form some other time ; but there is no such safety-valve for the imagination in the shafts in question, the thick frustra being as highly finished as the thin ones—indeed, more so, for their angles are rounded with extreme delicacy. Furthermore, the alternate frustra, without any visible excuse, are of different *depths* as well as thickness, and all the lines produced by the rustication are continued from the attached shafts into the wall-surface, so that the distinction and contrast which ought always to be carefully maintained, and, as far as possible, heightened, between column and wall, is almost abolished ; and the diverse thickness of masonry, as marked by the rustication, being not diverse enough to be distinguished at once, the whole basement story wears an appearance of uncertainty and elaborate waste of labour most painful to an eye accustomed to the perfect and immediate intelligibility of Greek forms. Finally, the vertical slips of masonry between the win-

dows of the basement story are capped with the delicate Greek antæ-mouldings, (see our former analysis of Greek architecture,) the original significance of which is quite abolished by the deep rustications below them, and by the destruction by rustication of the columnar character in the neighbouring shafts, with the moulded capitals of which, in Greek architecture, the antæ-cappings are exquisitely calculated to contrast. Now, we doubt not that the architect had very good reasons for every one of all these, and many other unveracities which we could point out in this building: all we maintain is, that very much better reasons may be alleged against them; and that very much better reasons are alleged against them in the simple presence, on the other side of Pall Mall, of the Reform Club, a building, as it seems to us, of extraordinary beauty and nobility; indeed, in the whole range of Renaissance art we know of no façade so void of offence against architectural truth—not even that of the Pandolfini Palace at Florence, in which the pediments of the windows, according to the most prevalent Renaissance practice, are alternately round and angular, without any excuse in the world but the love of variety. Now variety ought never to be, or at least seem to be, a primary object of even the slightest detail. The variety of the Renaissance compared to that of the Greek architecture, is like the variety of nonsense verses beside that of the verses of “Comus” or the “Princess.” In the Reform Club Renaissance forms are subdued to an almost Greek degree of purity, so that it can scarcely be said to belong to the Renaissance school at all—for the faults of this style of art may be almost said to constitute its principles.

The Renaissance architects generally made a great display of construction in the heads of apertures. The key-stone, in particular, was emphasized in various ways. Mr. Ruskin, whose profound hatred of the falsehoods of the style has not allowed him to give the praise which we think is due to some of its characteristics, objects that in an arch “one voussoir is as much a key-stone as another;” whence it would follow that the central stone has no claim to be more strongly expressed than the other stones. This, however, is not the case; and our old associations concerning, and figures of speech deduced from, the key-stone are perfectly correct. In a semicircular arch, for example, if constructed of many stones, the first two or three, or more, on each side will stand of themselves, as we may sometimes see in ruined archways; there is less of this simple support in every succeeding stone towards the centre, where the key-stone is suspended over clear vacuity by its own weight, which prevents it from being pushed out of its place upwards by the tendency of the stones on either side to fall in. It is evident, there-

fore, that not only is the central voussoir constructively distinguished from all the rest, but that each pair of the other voussoirs differs from every other pair in the degree to which the key-stone character is shared by it, the pair next to the key-stone exercising more resistance, and also demanding more support, than the next pair, and so on. Some of the most beautiful effects of the Renaissance architecture are obtained by simply expressing this principle. A common method of doing so, where the aperture-head consisted of only a few blocks, was to increase the dimensions of the block in all directions as it approached the key-stone, which was broader, deeper, and more projecting than any of the other stones.* The fondness of the Roman and Renaissance builders for the forcible expression of the masonry of the heads of apertures led them into several abuses. No doubt the decoration of the key-stones, with carved heads and other devices, was intended to heighten their architectural significance; but, if we mistake not, such decorations have quite an opposite effect. A difference in kind seldom serves with good effect for the expression of a difference in degree. Another abuse, which arose from the fondness for exhibited masonry, was the formation of the heads of apertures in arches, or, if horizontal, in several blocks put together upon the principle of the arch, when the aperture might have been covered by a single horizontal lintel. This practice is particularly unjustifiable when, as in the basement of Palladio's Palazzo Thiene at Vicenza, there are stones to be seen in the wall which would have done very well in the place of the expensive and elaborate composed lintels that at present crown the apertures. This same basement exhibits a further abuse of the principle in question; the line of horizontal voussoirs, of which we have been speaking, is obviously fitted for discharging superincumbent weight, but this operation is performed by an equally strongly expressed arch, which surmounts and renders meaningless the horizontal member. It is obvious that the first condition of beauty in displayed construction is, that the construction be useful. A very gross form of this species of abuse is the juxtaposition and confusion of the lintel and the voussoir system in one and the same horizontal aperture head; as in the principal windows of the before-mentioned Palazzo Thiene, and in the basement windows of L. da Sigoli's Renuccini Palace at Florence. Another temptation into which the Renaissance architects fell, through their desire to make the

* At the east side of the quadrangle of Somerset House there is a curious and pleasing accidental increase of conspicuity given to the key-stones by the lightness of their colour, produced by their greater exposure to the weather on account of their projection.

most of this means of effect, was that of introducing arches where arches were not required. When the arch is not the prevailing form of the heads of apertures, its admission is excusable only when the aperture is too broad for a straight lintel; but in Renaissance buildings we often find some of the apertures in a façade arched, and others of the same width horizontal, there being no better excuse for the difference than the already denounced itching for an inexpressive variety. It may further be laid down as a rule, that in a style of architecture derived from the Greek, of which the artistic life was based upon little more than a decorative ostentation of the horizontal construction, arches are always bad unless they bear their apology upon their faces, that is to say, unless they cover apertures which it would be difficult to cover horizontally. Small arches in a Renaissance edifice built of large stones are inexcusable. The pointed arch, in Gothic architecture, depends for its justification upon another principle than that of constructive utility, and it may be as small as the architect chooses without loss of significance. This is true also of the semicircular arch in Lombard architecture, partly by reason of the greater boldness with which the Lombard architects claimed it as a decorative feature, partly on account of the absence, in this style, of the principle of exhibited masonry, and the consequent non-expression of the constructive utility of the arch.

The Renaissance architects frequently and legitimately employed the principle of rustication to express additional strength in the quoins of their edifices. The Pandolfini Palace affords a beautiful example of this application of the principle; but in other instances we find it applied in a trifling and extravagant manner. The dados, for example, of the pedestals to some of Palladio's columns are bound at the corners with massive, deeply rusticated, and rock-worked blocks. For a very absurd instance of this kind of abuse, though in a different style of architecture, we refer our readers to the new Law Buildings in Lincoln's Inn Fields, where the ashlar work, which strengthens the tower, is carried up, for the sake of uniformity, into the shallow battlements that surmount it.* We have already observed, that perfect simplicity and intelligibility are essential conditions of good rustication. When the face of a block has more than four sides to it, there is danger of the construction becoming obscure; but what shall we say to the faces of the stones between the window

* We would not be understood to find fault with this mass of building upon the whole. On the contrary, we think it one of the most promising efforts of modern architecture. It is a real ornament to London, and one which will never have its attractiveness much impaired by the spread of architectural knowledge among the people.

heads of the Palazzo Gondi at Florence, each of which has fourteen sides! The basement rustication of this palace is, however, very fine: a very remarkable expression is obtained in it by variations in the thickness of the courses of stone, according to their position, but our space will not allow us to enter upon its analysis.

In estimating the propriety of the Renaissance basement-rustication, and in transferring the system to modern edifices, builders have too often forgotten that the edifices of the Renaissance which were most boldly rusticated, were justified in their expression of vast power in the wall, by the necessity of serving the double purpose of residence and fortress. The rustication of the Pitti and Strozzi Palaces in Florence would be absurd in a modern dwelling-house. The architect of Newgate Prison was quite right, however, in boldly rusticating his wall, and in yet further emphasizing its power by shewing that it could further afford to have niches excavated in its thickness. Deep rustication is not rightly admissible into any but the basement story, unless the building is intended for a fortress. Slight rustication, particularly that in which only the *horizontal* junctions of the stones are visible, is, however, extremely valuable in the principal story when columns occur in it. For a full account of the principle upon which rustication acts in this position, we must refer our readers to our former analysis of the Greek Temple architecture.

We might fill the rest of our space with other rules and interesting instances of good and bad rustication; but valuable and new as the investigation would be, we must say no more about it here. We have said enough to make hundreds of wall surfaces interesting to the general reader, which were never interesting to him before; and if any student wishes to pursue the subject further, he cannot do better than study it from the very full and satisfactory series of engravings which have appeared from the edifices and designs of Palladio,—the purest, by the way, of all the Renaissance architects; for though he abandons the essentially constructive, with its characteristic ornamentation, and is well satisfied if his decorations have a faint reminiscence of constructive meaning, yet there is not much utter nonsense—like triglyphs supporting balconies—in his works. There is a great deal of expression in his edifices, which, with regard to the constructive element, is inadequate or extravagant; but this inadequacy and extravagance are commonly sacrifices of one kind of excellence to another. The excellence sacrificed, is, we repeat, the excellence of *truth*; and it seems to us that in art as in morals such evil ought not to be done, however great an amount of good may appear to result from it.

All that we have said of the "orders" as employed and spoiled by the Romans is true of them as they appear in Renaissance buildings. A few timid alterations were ventured upon; and most of the great architects had "orders" called after their names, the main distinction of these from any other orders being, as far as we can understand, no more than an entirely arbitrary regulation of the proportions of member to member, the members themselves being, for the most part, equally arbitrarily chosen and unnecessary. "Vignola's Tuscan," for example, is a bald Doric, totally without any distinctive character, save that of baldness. The omission of triglyphs makes the separation of architrave and frieze unmeaning; the astragal, on the neck of the shafts, if it suggests anything, suggests weakness; the fillet above the abacus, and the filletless ovolo that crowns the cornice, are sheer nonsense, the fillet being a separating member where there is no separation operated, the ovolo* being a supporting member when there is nothing to support. The rigid and fixed proportional systems, of which the Greeks knew nothing, were, as we have said, arbitrary, and not founded upon the only right basis, namely, the expression of the due proportion of power of support to power of gravitation.

Some of the best features of Renaissance architecture are its cornices. The Reform Club is a fine imitation of one of the finest examples. A conspicuous cornice like this is particularly necessary where the "orders" are not used in the façade, and where consequently the wall may be allowed to express a capacity for supporting great weight, as well as for enclosing. Seen from the east corner of St. James's Square, the effect of the noble sweep of the wall, the ridged and massy roof, and the powerful cornice which operates their junction, is one of the finest architectural sights in London.

The windows of the Renaissance style have commonly had the architect's best skill devoted to them; and in many cases, with fine effect. Their peculiar decoration generally had the good effect of either denying or diverting the mind from the idea that the wall was weakened by them. The Greeks, in the few examples of their fenestration which remain to us, contented themselves with an extremely simple and satisfactory arrangement, consisting merely in the inclination towards one another of the single stones which constituted the sides, and which, together with the lintel that projected a little way beyond them,

* In Greek architecture the ovolo always bears a thin slab—sometimes erroneously called a fillet, the weight of which, as indicated by the strong supporting curve of the ovolo, is transferred by the mind to every equal thickness of stone in the whole entablature beneath.

of our modern English architects appear to have taken the decayed teeth of elephants for their type ; but, for the most part, it resembles nothing so much as worm casts, nor these with any precision. If it did, it would not bring it within our sphere of properly imitative ornamentation. I thought it unnecessary to warn the reader that he was not to copy forms of refuse or corruption ; and that while he might legitimately take the worm or the reptile for a subject of imitation, he was not to study the worm cast or coprolite. It is however, I believe, sometimes supposed that rustication gives an appearance of solidity to foundation stones. Not so ; at least to any one who knows the look of a hard stone. You may, by rustication, make your marble or granite look like wet slime, honey-combed by sand-eels, or half-baked tufo covered with slow exudation of stalactite, or rotten claystone coated with concretions of its own mud, but not like the stones of which the hard world is built. Do not think that nature rusticates her foundations. Smooth sheets of rock, glistening like sea waves, that ring under the hammer like a brazen bell—that is her preparation for first stories. She does rusticate sometimes ; crumbling sandstones with their ripple marks filled with red mud ; dusty limestones, which the rains wash into labyrinthine cavities ; spongy lavas, which the volcano-blast drags hither and thither in ropy coils and bubbling hollows ; these she rusticates, indeed, when she wants to make oyster-shells and magnesia of them ; but not when she needs to lay her foundations with them. Then she seeks the polished surface and iron heart, not rough looks and incoherent substance.”

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The legitimate ends of rustication being these and these only, it is obvious that rustication can be properly employed only upon large and thick walls, or on solid masses of masonry. But the Renaissance architects, in imitation of their masters, the Romans, though they often employed rustication with admirable effect in the right places, often also lavished it in situations which converted it into unmitigated absurdity. Columns, the beauty of which, as all must feel, and as we proved in our former Article, depends almost entirely upon the uninterrupted perfection of the

sides ; but we hope that we are not biassed by party-spirit in siding chiefly with the amateurs. Of the two kinds of mistake, the most fatal, though not the most foolish, is that which is made by the architects. Knowing what great and numerous difficulties have to be overcome, and being, for the most part, without the genius to add to the builder's art of overcoming constructive difficulties, the architect's art—not of hiding those difficulties, but—of making an advantage and boast of them, by making them the root and meaning of new and unique architectural character, the professor angrily rejects all non-professional criticism, not only of matters of internal distribution, of which, of course, he is generally the best judge, but also of architectural effects, of which we humbly opine that every one with natural good taste and a moderate amount of instruction, is likely to be as competent a judge as himself. He would have uninitiated people, however, to believe that it is a prodigious instance of presumption in them to pretend to know whether the façade, which foists itself daily upon their sight, and whose prosperity, if prosperity it have, must be in the eye of the daily spectator, is good for anything or not : and the uninitiated, in fact, have been so long accustomed to hear works, from which they receive no pleasure, called architectural, that they have, for the most part, come to discredit their own capacity, and have very naturally contracted a profound indifference towards an art which seems to be without a message to themselves,—which, instead of fulfilling its right errand, as incomparably the most popular of the fine arts, has come to be considered by its professors as being scarcely less esoteric in its artistic than in its constructive departments. The present indifference of the people about architecture is, in itself, an excellent negative symptom of their capacity for enjoying it ; and they would probably be not slow to exhibit this capacity positively, should there arise amongst us many of the better kind of buildings, having even the qualified merits of some few by which London has been recently adorned.

We are now to speak of the “Italian-Pointed” style to which Mr. Ruskin has succeeded in attracting a wide and deep interest. Mr. Ruskin endeavours to prove that this style, as displayed in the Venetian palaces, especially the Palazzo Ducale, is the culminating point of the art of architecture. And he is perhaps right, as far as regards metropolitan palatial architecture, but, we think, no further.

The church architect cannot serve two principles without miserable failure ; but the house architect may and perhaps ought. The Egyptian principle was a good one for Egypt ; the Greek principle was a good one for Greece ; the Romano-Byzantine or Lombard was a good one too ; the pointed Gothic the

mirable to contemplate of all the perfections of God ; and we think that Mr. Ruskin has not given the famous painters and architects of the period in question, sufficient credit for its symbolization in their works. The moderation which results from the artificial necessity of every one of innumerable details, assuming, remembering, and working in concert with all the rest, ravishes the heart with a joy far greater than any that is to be obtained from our wretchedly imperfect means of transferring literally upon stone or canvass, the endless harmonies of nature. To this artificial necessity no merely outward knowledge and skill in art will ever enable a man to submit himself. Nothing but genius, which is a more lively impression than ordinary of the image of God upon our being, can enable a man to express this unity in multitude so as to touch the heart : but when a man has genius he can evolve this divine harmony out of the poorest materials, and can so combine things false in themselves, that they shall give utterance to this unity, which is the fundamental truth of the universe, spiritual and natural.

The architecture of the Renaissance is loaded with details, which in the hands of the Romans, who first abused them, were gross falsehoods, but which in their revival in the fifteenth century, should rather be looked upon as mere ignorance, superstition, and nonsense. What was Roman was right ; those who questioned in thought, and scorned in practice the Christian faith, would have been horribly scandalized by freethinking in matters of antiquity ; the plenary inspiration of Vitruvius was an article of the Renaissance creed ; and the hideous barbarisms of the out-worn and perverted civilisation of ancient Rome, were looked upon as constituents of a golden age of art, which it would be presumptuous to think of equalling, much less amending. If the Renaissance architects sometimes invented new details, or combinations of details, it was in the humble spirit with which a translator—Pope, for example—of a famous ancient poet might venture upon adding a “grace” or two of his own, in order partly to compensate for his inability to express the perfection of the revered original. They do not seem to have had the remotest suspicion that their modified translations were often incomparably superior to the originals. The Renaissance architects, in fact, were not bold enough to be as bad as the late Roman architects,—just as our church-builders are not bold enough to be as good as the mediæval architects. There is a nightmare-ish deformity and depravity about some of the remains of late Roman work ; an air of vast, but mal-appropriated, and even fiendish power, which revolts the rightly cultivated spirit, but simply awes and intimidates into cowardly

public buildings, as exchanges, museums, banks, clubs, in which a few large apartments only are necessary, and a certain ostentation commendable, the Venetian Gothic is unequalled; and we hope that before long, it will have wholly superseded the quasi-classical and totally anti-national Renaissance in our great towns. Renaissance forms, should they be employed by us to the end of time, will always be felt to be repulsively foreign; whereas the façade of the ducal palace or the Palazzo Foscari, if transferred unaltered from Venice to Pall Mall, would be at once accepted by us as native to our feelings, educated as we have been to regard every moulding, cusp, arch, and leafy capital as almost a part of our ancient worship. This transference might, moreover, be made without the least alteration in the system of internal distribution at present adopted in such buildings as the Reform and Athenæum Clubs.

A very common feature of the Italian palatial Gothic is an open arcade in the place, or in advance of the apartments on the ground-floor. This, which is one of the most striking characteristics of the style; is that also which qualifies it beyond all other styles for a shop-architecture. An open basement and closed upper stories are conditions which no architecture besides the Italian Gothic and the Arabian was ever gracefully fulfilled: now these are the primary conditions of a good shop architecture. How far our present shop architecture, consisting generally of a load of Renaissance masonry superimposed—not on a powerfully expressed basement of rusticated blocks, but—on two or three square sheets of invisible plate-glass, fulfils these conditions, must be tolerably manifest to any who have thought one moment about the matter. In “New Oxford Street” five or six costly experiments in shop architecture have been tried; all of them utter failures in fundamental constructive good sense except one, in which the open arcade has been adopted, and this one, though thus far right, is hideously ugly, because there is no expressed relation whatever between the form and strength of the arcade and the forms and weights of the mass which it supports. The principal façade of the Doge’s palace might have been substituted with splendid effect, almost without alteration, and with far less expense, in the place of this or any of the other four or five rows of houses in question.

The basement arcade, however, is not an *essential* feature, and therefore this style of architecture is just as well fitted for rows of private houses as for rows of shops. It admits of uniformity or of infinite variety in the decoration of apertures. A whole street may have every window alike, or every window in the same house may be *unique* in its ornamentation, as in the exquisite Palazzo Publico at Piacenza.

of our modern English architects appear to have taken the decayed teeth of elephants for their type ; but, for the most part, it resembles nothing so much as worm casts, nor these with any precision. If it did, it would not bring it within our sphere of properly imitative ornamentation. I thought it unnecessary to warn the reader that he was not to copy forms of refuse or corruption ; and that while he might legitimately take the worm or the reptile for a subject of imitation, he was not to study the worm cast or coprolite. It is however, I believe, sometimes supposed that rustication gives an appearance of solidity to foundation stones. Not so ; at least to any one who knows the look of a hard stone. You may, by rustication, make your marble or granite look like wet slime, honey-combed by sand-eels, or half-baked tufo covered with slow exudation of stalactite, or rotten claystone coated with concretions of its own mud, but not like the stones of which the hard world is built. Do not think that nature rusticates her foundations. Smooth sheets of rock, glistening like sea waves, that ring under the hammer like a brazen bell—that is her preparation for first stories. She does rusticate sometimes ; crumbling sandstones with their ripple marks filled with red mud ; dusty limestones, which the rains wash into labyrinthine cavities ; spongy lavas, which the volcano-blast drags hither and thither in ropy coils and bubbling hollows ; these she rusticates, indeed, when she wants to make oyster-shells and magnesia of them ; but not when she needs to lay her foundations with them. Then she seeks the polished surface and iron heart, not rough looks and incoherent substance.”

The natural roughness of the stone, as it comes from the quarry, is, however, a valuable means of effect, apart from the opportunity it affords for marking the junctions by finished edges. The Renaissance palaces are almost always built in three stories—basement, middle, and attic. The middle story is devoted to the chief apartments, and is the part upon which all the splendour of the classic “orders” is lavished. The basement is carefully expressed as such, and is made to appear, as well as to be a ground and preparation for the principal portion of the edifice. Strength and comparative absence of finish are its proper expressions ; and these are legitimately obtained, the first by deeply chamfered masonry, the last, by the natural roughness of its surface.

The legitimate ends of rustication being these and these only, it is obvious that rustication can be properly employed only upon large and thick walls, or on solid masses of masonry. But the Renaissance architects, in imitation of their masters, the Romans, though they often employed rustication with admirable effect in the right places, often also lavished it in situations which converted it into unmitigated absurdity. Columns, the beauty of which, as all must feel, and as we proved in our former Article, depends almost entirely upon the uninterrupted perfection of the

size, are excellently suited for a northern climate; and the brilliant upper termination of the wall, being the principal decoration of the building, and having the advantage of a position far removed from the causes which could distract the attention from the beauties of the basement, might be executed, according to the fancy or the funds of the proprietor, with almost any amount of labour and expense. The poorest man would find this style the cheapest of all decorated styles, and the richest might lavish his money upon it without limit, and with a thousand times the effect which he obtains by wasting it upon plaster, columns, pediments, entablatures, friezes, and the rest of the Renaissance frippery.

But all the characteristics which tend to qualify the Italian-pointed style for civil purposes, almost in the same proportion tend to disqualify it for churches. Mr. Gally Knight writes,—“In Italy, if the vertical principle was adopted, the horizontal was not discarded, and the latter was a constant check on the tendencies of the former. The Italian architects, obeying their employers, but obeying with reluctance, never acquainted themselves with the rules, the proportions and arrangements, through which the northern architects produced successful results. They worked at random, and, consequently, made mistakes. They consented to imitate, but they sought no more, and neither caught the spirit of the original, nor struck out new paths of their own.” This appears to us to be an injustice to Italian-pointed architecture in general. Its deviation from the northern style is too wide to have arisen from ignorance. In almost all examples there is a manifest attempt to reconcile conflicting principles,—an attempt which could not have been made without acquaintance with those principles; and, in some few cases, pre-eminently in Giotto’s celebrated Campanile at Florence, those principles are reconciled with the profoundest art. These last cases, though extremely few, alone can claim to be considered as examples of true Italian-pointed. An enumeration and analysis of the means by which the different principles are reconciled in these examples, would leave us no room to remark upon a style of incomparably more importance to us than the Italian-pointed ecclesiastical, namely, our own late “Tudor” style, which is another species of secularized Gothic.

Of this style there are various shades; we shall remark only upon the most striking general characteristics. It is an essentially Northern, and even an essentially English style; it is so admirably and unconsciously expressive of our national feelings of independence and love of *comfort*, that it can never be out of date. The principal façade is the consideration to which, in all other styles, the various members of an edifice are subordinated; but

the comfortable hearth seems to be the centre about which all the parts of the Tudor palace, or the Elizabethan mansion, are gathered, and from which they derive their cheerful life. Mr. Joseph Gwilt writes,—“The Elizabethan, or as some have perhaps more properly called it, the last Tudor style, is an imperfectly understood adaptation of classic forms to the habits of its day in this country. It is full of redundant and unmeaning ornament, creating a restless feeling in the mind of the spectator, which, in the cinque-cento work, the Renaissance of Italy, was in some degree atoned for by excellence of design, by exquisite execution of the subject, and by a refinement in the forms, which some of the first artists the world ever saw gave to its productions. In Italy the orders almost instantaneously rose in their proper proportions, soon leaving nothing to be desired; but in England they were for a long time engrafted upon Gothic plans and forms, producing nothing but heterogeneous masses of absurdity.” Such we believe to be a common *opinion*, it cannot be a common *feeling*, concerning our Elizabethan style; but a minute’s consideration will shew the erroneous nature of the comparison between it and the Italian cinque-cento. The form and arrangement of the general mass of an edifice are the fundamental causes of its peculiar character. Egyptian, Greek, Gothic, Lombard, and Italian palatial, whether Gothic or Renaissance, are each of them immediately and mainly to be distinguished from the other styles by the character of the masses; and it may be safely said, that the difference in this regard, between the late Tudor and the Italian Renaissance styles, is wider than between any other two styles whatsoever. *Happily* “the orders” have a very poor development indeed in Elizabethan buildings. They are of the essence of the Italian Renaissance, but are merely superficial decorations of the Elizabethan architecture. The character next in importance to the subordinations of mass to convenience, in the Tudor of Henry VIII.’s time and the Elizabethan Gothic, is, perhaps, that of fenestration. But this is a character which the house Gothic of England shares with that of other countries, France especially. The broad window, divided vertically into equal compartments by mullions, and horizontally into unequal portions by transoms, and surmounted by a dripstone, which admits of the most beautiful lines and mouldings, is the only window that ought ever to be seen in a northern house. It is unsurpassable in the expression as well as in the reality of convenience and safe construction; and upon the display of these qualities the beauties of private house architecture must always mainly depend. A most picturesque feature, common in house architecture of this period, is the successive projection of story over

story. This feature gave endless scope for architectural display, in the brackets and mouldings which were required for security; but it is one which the present universal employment of brick and stone, with no *visible* aid from wood, has rendered obsolete. It is true that an ordinary brick-house, if built in this manner, would have its walls defended from the rain, and would not be turned into a refrigerator by every shower; but the same end might be, and in some parts of the country is, infinitely better answered by glazing the bricks, and so preventing absorption. Even in places where wood is still the chief material of house architecture, this is not a manner of construction that could reasonably be adopted, since modern science has given us much less expensive and inconvenient means of defending timber against the effects of moisture. The loss of this source of architectural effect is, however, the less to be regretted, as a similar effect is obtainable by the projecting oriel window, a feature of extreme beauty, and one that is susceptible of great variety of treatment.

We believe that it may be laid down as a rule in civil architecture that all the characteristic effects of temple architecture may and ought to be reproduced in it, *but with less intensity*. This diminution of intensity, or secularization of the effects of temple architecture, is obtainable either by mixing those effects with others of inferior significance, or by giving a preponderance to those elements of effect which, though occurring in, are least characteristic of, the temple architecture. The last method is obviously the best; and, though it has rarely been employed without the former, it would have been better if it had been so. The phase of "Tudor" architecture which immediately preceded the introduction of the cinque-cento decorations in England, exemplifies what may be termed the *pure* secularization of Gothic; the proper "Elizabethan" being a product of this combination of both methods. For the revivals of our ancient house architecture which have recently been attempted, the phase commonly chosen has been that in which the decorations are borrowed from the most degraded Renaissance; but surely Gothic masses with Gothic decorations are better than Gothic masses with classic decorations. It is true that the pure Tudor style has a degree of gravity which some persons might deem unpleasant in common house architecture; but, if this be a fault, it is overcome in the cinque-cento Gothic only by the far worse fault of senseless flippancy.

The Tudor, like the Italian palatial Gothic architecture, has the great advantage of admitting of innumerable different degrees of enrichment, without altering its essential character; and, though capable of a dignity far surpassing that which is to

be obtained from the most splendid efforts of pure or mixed "classical" architecture, it is suited also for the humblest purposes. We hope for the day, however, when, by a combination of the merits of Italian Gothic decoration with those of Tudor masses, we shall be able to boast of a domestic architecture surpassing any that has yet existed. On some future occasion we may perhaps enter more fully than we have now been able to do on the detailed analysis of Tudor and Italian Gothic.

Civil architecture, public and domestic, in our own day is guided by no general laws whatever. The impartiality with which we adopt every style alike indicates nothing but a profound indifference to all styles. Mr. Ruskin most justly writes :

"The great evil of all recent architectural effort has not been that men liked wrong things, but that they either cared nothing about any, or pretended to like what they did not. Do you suppose that any modern architect likes what he builds and enjoys it? Not in the least. He builds it because he has been told that such and such things are fine, and that he should like them. He pretends to like them, and gives them a false relish of vanity. Do you seriously imagine, reader, that any living soul in London likes triglyphs, and gets any hearty enjoyment out of pediments? You are much mistaken. Greeks did; English people never did—never will. Do you fancy that the architect of Old Burlington Mews, in Regent Street, had any particular satisfaction in putting a blank triangle over the archway instead of a useful garret window? By no manner of means. He had been told it was right to do so, and thought he should be admired for doing it. Very few faults of architecture are mistakes of honest choice; they are almost always hypocrisies. So, then, the first thing we have to ask of the decoration is that it should indicate strong liking, and that honestly. It matters not so much what the thing is, as that the builder should really love and enjoy it, and say so plainly. The architect of Bourges Cathedral liked hawthorns, so he has covered his porch with hawthorn, a perfect Niobe of May. Never was such hawthorn; you would try to gather it forthwith, but for fear of being pricked. The old Lombard architects liked hunting, so they covered their works with horses and hounds, and men blowing trumpets two yards long. The base Renaissance architects of Venice liked masquing and fiddling, so they covered their works with comic masks and musical instruments. Even that was better than our English way of liking nothing, and professing to like triglyphs."

The profound oblivion of the *grounds* of architectural merit, as implied in the above complaint, is impressively set forth in the following observation of Mr. Ruskin, in connexion with a review of his former work, "The Seven Lamps."

"The writer noticed my constant praise of St. Mark's. 'Mr. Ruskin thinks it a very beautiful building; we,' said the architect, 'think

it a very ugly building.’ I was not surprised at the difference of opinion, but at the thing being considered so completely a subject of opinion. My opponents in matters of painting always assume that there is such a thing as a law of right, and that I do not understand it; but my architectural adversaries appeal to no law—they simply set their opinion against mine; and, indeed, there is no law at present, to which either they or I can appeal. No man can speak with rational decision of the merits or demerits of buildings; he may with obstinacy; he may with resolved adherence to previous prejudices, but never as if the matter could be otherwise decided than by majority of votes, or pertinacity of partisanship. I had always, however, a clear conviction that there *was* a law in this matter; that good architecture might be indisputably discerned and divided from the bad; that the opposition in their very nature and essence was clearly visible; and that we were all of us first as unwise, in disputing about the matter, without reference to principle, as we should be for debating about the genuineness of a coin without ringing it. I felt also assured that this law must be universal if it were conclusive; that it must enable us to reject all foolish and base work, and to accept all noble and wise work, without reference to style or national feeling; that it must sanction the design of all truly great nations and times, Gothic, Greek, or Arab; that it cast off and reprobate the design of all foolish nations and times, Chinese or Mexican, or modern European; and that it must be easily applicable to all possible architectural inventions of human mind. I set myself, therefore, to establish such a law, in full belief that men were intended, without excessive difficulty, and by use of their general common sense, to know good things from bad; and that it is only because they will not be at the pains required for the discernment, that the world is so widely encumbered with forgeries and baseness. I found the work simpler than I had hoped; the reasonable things ranged themselves in the order that I required, the foolish things fell aside, and took themselves away so soon as they were looked in the face.”

The great good which is likely to be done by Mr. Ruskin’s fulfilment of the task he thus proposed to himself, may be estimated by the storm of anger with which his work has been received by architects. There are several points in the “*Stones of Venice*” which we hold to be extremely debatable; but these are trifles when compared with the quantity of vigorous criticism that constitutes the bulk of the book. How far Mr. Ruskin’s works may aid in producing a living architecture we cannot tell; but we believe it to be pretty certain, that the “deadly lively” architecture which at present prevails, cannot long exist in the face of such truths as have now been uttered, with a voice that *will* make itself heard, however unpleasant it may be to some of the hearers. It will be an immense advance, or rather retrogression, towards the right, if Mr. Ruskin should do no more than make our house builders and house buyers heartily ashamed

of the cheap splendour of false materials. Let us get back to the common brick walls—with stone dressings for the better sort of houses—of a hundred years ago, and we may then be in the way to something better. We shall have, at least, a footing in the truth, and may then take steps towards beauty.

The errors of modern house architecture are so numerous that we cannot pretend to enumerate even the chief of them; and close pressed as we are for space, we must content ourselves with referring the reader to Mr. Ruskin's bold and admirable attacks upon our entire modern system, and with stringing together a few of our own remarks, general and special, just as they come to mind—for any systematic arrangement would carry us far beyond our limits.

There is a common notion abroad that brick is a mean material, and only fit for poor men's cottages and cow-sheds. Now this is a great mistake. Brick is a very fine material, as good to look at, and better for enduring, than most kinds of stone; and some of the finest palaces in the world have been built of it. It is, in fact, an artificial stone, having nearly all the advantages of natural stone, and many other advantages which natural stone wants. It is capable of receiving inherent, that is, properly architectural, colour, for no colour is properly architectural which is liable to be washed or rubbed away; and being made in moulds, which may as well be of one shape as another, it is fitted to become the vehicle of a system of decoration far more elaborate than can be applied to stone, under any circumstances, but those of extraordinary magnificence and expense. This decoration is also capable of being made highly characteristic: not many persons, perhaps, are aware that the characteristic Norman decorations, which we admire so much in some of our cathedrals, and which we are now reproducing in many of our churches, with great expense and success, are properly brick decorations. Hear Mr. Hope:—"The natives of Lombardy became early celebrated as masons; early, therefore, they began in those parts of brick buildings, which like arches, imposts, friezes, cornices, and string-courses, at once admitted and required somewhat more ornament, to shew their ingenuity, by laying the materials in such a way that their sides and angles should offer various combinations, resembling the teeth of a saw, the spine of a fish, the zig-zag of a fish-net, and others of easy execution, and showy in their effect: and these we behold throughout Lombardy, and at Rome, in all the brick *campaniles*, and more especially in that singular assemblage of ancient fragments and brick-work, supposed to have been the habitation of Nicholas, the son of Crescentius and Theodora. This species of work, alike adopted in Constantinople and in Lombardy, became, in the former, the

embryo and life of singular combinations of facettes and angles, with which the Mahommedans afterwards covered, in their buildings, every capital and cornice, bracket and niche ; and in the latter, the parent of the cord and the cable, the zig-zag, or the chevron, the lozenge, the billet, the nebule, the embattled fret, and all other ornaments having no peculiar meaning, introduced in shafts, capitals, arches, and other members of Lombard buildings, which we have since called Saxon ; which have been introduced so early that we see them in all the miniature paintings of the Syriac MS. of the Evangelists, in the Medico-Laurentian library at Florence, written A.D. 585 ; and which appear in the edifices of the middle ages in greater numbers, as they are more wanted to supply the deficiency of sculpture and significant ornaments."

Again, "Every part of that extensive plain (of Lombardy) offers edifices in the cinque-cento, as well as in the Lombard and German manner, wholly of brick, and in which that humble material is ennobled by the most exquisite and delicate forms." Some of the best churches and public buildings of our own day are of brick, with stone dressings ; it is only in the private houses of England that we seem to be ashamed of this material.

If the builder cannot afford stone finishings to his brick-house, let him by no means make plaster imitations of them. Every one knows stone from plaster at a glance, and every one knows that stone finishings are only used where larger and more coherent masses of material are required than can be supplied by bricks. Now, to put masses of plaster, which are well known to be infinitely *less* fitted than the bricks themselves are to supply the requisite occasional accessions of strength, is a most disgusting absurdity. Plaster is a very useful material when it does not pretend to be stone ; its use in many Renaissance and Elizabethan decorations in secure positions, as in bas-reliefs upon, or along the walls just beneath ceilings, is, we are disposed to think, legitimate ; but it is utterly to be reprehended in every position of exposure to rough usage.

It should be remembered that forms which are right and expressive in one material, may, and most probably will, be unmeaning, and worse than unmeaning, in another. What conceivable sense is there in *rusticated plaster*, of which London contains thousands of acres ? or in the plaster brackets, held up by, instead of supporting, plaster cornices ? As if architects and builders had, more than other men, a propensity for lying merely for lying's sake, you will find them even ruining a real material by forcing it, against its nature, to assume the forms of a totally different real material. Thus, London is not wanting in examples of expensively built brick-houses, whose builders disdaining the

timid plaster falsehood, which has some pretence of making itself believed to be the stone it imitates, have absolutely rusticated the bare brick, and constructed mock voussoirs in door and window-heads, each voussoir being constituted of several bricks mortared together in the ordinary way! Sometimes we may see brick voussoirs of this kind alternating, in the same door-head, with mock-stone voussoirs of plaster. There are hundreds of new houses in and about London and our great provincial cities, which are unmitigated architectural nonsense as they stand, but which would be changed at once into intelligible, if not agreeable, objects, by the mere realization of the mock material, as an "invisible picture" comes out when held before the fire. There are *hundreds of miles* of two or three story houses in London with the ground story made to look like a rusticated stone basement. Now, a far more architectural proceeding would have been to have set the one or two fragile upper stories upon six or eight stout broom-sticks. In these small houses, the thinnest brick wall is thicker than is need for the support of the story or two above it; but as a certain thickness is required for other purposes than that of support, and as, therefore, the power of support, and the weight supported, must be out of proportion one to the other, a sensible builder, instead of vastly increasing and emphasizing this disproportion, would conceal the fact of it as far as possible. This may be, and in some few cases has been done, by making the face of the upper stories *project* slightly *beyond*, instead of recede from, the face of the basement story.

Let it be remembered that, so far from its being advisable to make bricks look like stone, we ought rather, in our northern climate, and in a country where the poorest man likes to have a house to himself, to make a boast and display of it: since, among many other reasons, a stone material, unless the apertures are arched, requires narrow fenestration, and always produces a decidedly unarchitectural effect in edifices of inconsiderable size. In Scotland, and the North of England, however, the abundance of stone is a reason which outweighs these disadvantages.

Plate-glass is very injurious to the effect of house architecture, as well on account of the great size of the panes commonly used, as by reason of its being, when well-cleaned, quite invisible. The smaller the panes, the rougher the glass, and the more conspicuous the frames in which it is set, the better for the architectural effect. There are few windows so architectural as the old casements, made of little lozenge-shaped panes set on a net-work of metal bars. The absence of any suggestion of resistance to the vertical and lateral wall-pressure which is always suggested to the mind by square-headed apertures, is very painfully felt when,

as is often the case in modern houses, each window-sash contains but one pane.

Comfort, modesty, and permanence ought to be the leading expressions in every *private* house, however noble its inhabitant. The leading expressions of modern house architecture are discomfort, pride, and impermanence. "Much of the naked and solitary appearance of [modern] houses is owing to the practice of totally concealing, nay, sometimes of burying, all the offices under ground, and that by way of giving consequence to the mansion; but though exceptions may arise from particular situations and circumstances, yet, in general, nothing contributes so much to give both variety and consequence to the principal building, as the accompaniment, and, as it were, the attendance of the inferior parts in their different gradations."—(*Price on the Picturesque*.) So far is the house architect from being in danger of having to sacrifice effect to convenience, that a display of convenience is the most valuable element of effect at his command. The most beautiful examples of British and foreign house architecture—not public or palatial—are those in which all care of even the commonest symmetry and order is cast away, and in which the house seems to grow, as we have said, from its root in the hearth, as wildly as the trees that surround it. There are certain weighty reasons for regularity and uniformity of façade in street architecture; but the Englishman's beloved privilege of doing what he likes with his own, outweighs them all, and it would be incomparably better by a studied and otherwise needless and even inconvenient variety in street architecture, to give him free scope for his "individualities"—than to let him violate, as he will, however you may preach, the prudery of symmetrical "rows," "crescents," "quadrants" and "squares,"—painting his domicile long before, or long after his neighbour has painted his, and so sometimes punishing a pedimental façade as Dante punishes the schismatics in hell, namely, by splitting them in half; erecting unique verandahs before his windows; crowning his chimney-pots with fantastical charms against smoke; graining his door with light maple pattern, because his neighbour's is dark mahogany; and indulging in a hundred other equally unsymmetrical declarations of independence—that number being multiplied by ten when we come to shops, instead of private houses.

In matters of decorations generally, modern architects fall into one or other of the extremes of meretriciousness—mistaken for richness; and poverty—mistaken for simplicity. True simplicity arises from distinctness and well pronounced unity among many details, and not from paucity of ornament. Richness is not only compatible with simplicity; it may greatly increase it.

There is no simplicity like that of the Duchess who wears her coronet as if it were a wreath of May.

Nothing can be more absurd than to juxtapose the conscious dignity of Greek forms, with the inevitably humble associations of trade and business. We do not hold with Mr. Ruskin, that shops and railway stations ought to be wholly devoid of architectural charms. We believe, on the contrary, that Christian architecture, that is, pre-eminently the northern pointed, is as remarkable for its adaptation to all degrees as Christianity itself. Apart from the constructive principles of pointed Gothic there is a power in the mere form of the pointed arch which has never yet been satisfactorily accounted for. A mere suggestion of it is enough to change the whole character of a building, as may be seen in several of the early Renaissance Italian palaces, in which the outer line of the voussoirs of semi-circular door and window-heads constitutes the pointed arch.

If we must copy ancient styles—and there is no help for it so long as we have none of our own—let us copy the best styles, and the best phases of those styles. The modern practice of crowning steeples with what are technically called broach-spires, *i.e.*, spires of which the eaves overhang the wall of the steeple, instead of the subsequently invented spire rising considerably within the wall, and surrounded by a gutter with a parapet and pinnacles, is one of many modern practices which are not more sensible than it would be in the mechanical arts to prefer canal boats to railways. The mistakes which have arisen in architecture during the last five-and-twenty years, merely from want of judgment in choosing the right styles, and the right phases of the right styles, are in number and magnitude something quite appalling to think of. During this period, in London alone, we have raised public buildings, probably more numerous, costly, and magnificent, than any entire nation before us has raised in a century. The Houses of Parliament, the British Museum, Buckingham Palace, the Post-office, the Royal Exchange, the new West-End Club-Houses, and churches innumerable, testify to our unprecedented riches and unprecedented want of consideration. The same money, judiciously expended upon the same and other edifices, in the early “Decorated” for ecclesiastical, and the late “Tudor” for civil purposes, might have transformed London from the least architecturally meritorious of all great cities in Europe, to the most so. It is sad to think, that, as such an opportunity has never before occurred, so probably it will never occur again.

There is a certain artistical anachronism involved in the revival of any ancient style of art. There is also a great source of beauty in an original architecture which cannot be renewed in

the revival of such an art : we mean the delightful sense of life arising from the growth of one phase of the style into another. During the career of an original architecture, every considerable building constitutes an advance upon its predecessors, and its achievement of some unprecedented beauty makes criticism dumb to its defects. So far have the ancient builders been from entertaining the modern craving for a critical completeness, that there is scarcely a finished Greek temple, or a Gothic cathedral in existence. This is a curious fact, and one which we do not remember to have seen noticed ; and it is one which remarkably illustrates the eager life of a new art. How incomparably more attractive are unsuccessful efforts after the highest perfection, than successful attempts at mediocrity ! Architecture, in its best times, has always exhibited what, in speaking of a Christian's life, an old divine calls an "incomplete completeness." We do not say that it would be possible or right for us to try to imitate this quality. We have no vital architecture, and yet we must build. Let us, therefore, thoroughly comprehend and adopt the only style that is fit for us.

A notion has been gaining ground lately that there may be some hope of an *entirely new* architecture arising from the employment of a new material, namely, iron—and it seems to us that there are substantial grounds for this hope. We have said that the principal architectures of the world have been indebted for their fundamental expressions to particular references to the laws of gravitation. Every legitimate kind of reference which is capable of being made in stone or brick appears to have been exhausted ; but iron is capable of affording *two new references* of which stone and brick are incapable, namely, *suspension* and *impension* of weight. These principles have already been frequently and splendidly employed in the mechanical arts, but no distinctly architectural development of them has ever, to our knowledge, been attempted. There are a few minor, but still very important considerations with respect to iron as an architectural material at which it will be well to glance.

The constructive ideas of Gothic and Arabian architectures are such that they can only be fully realized in iron. The fancy is scarcely able to pursue the reality which has become possible for Gothic architecture through the present abundance of iron and glass, and the skill we have attained in working them. A cathedral twice as big as Cologne, with a spire a thousand feet high, would be quite a moderate undertaking compared with the cathedral of Milan, or the Gothic Houses of Parliament. Witness the expense of raising the Great Exhibition !

Iron *requires* painting. Here is a source of decoration which would almost outweigh the impossibility of carving in that mate-

rial. It is capable of being employed with wonderful advantages in conjunction with slate. Iron is susceptible, as Mr. Pickett has shewn in a pamphlet upon the subject, of a very characteristic and beautiful species of decoration, by what that author calls "interstitial form." The advantages of iron and slate for domestic architecture are numerous; one or two only can be mentioned here: hollow walls, filled with sand to prevent the transmission of sound, would retain warmth better than any other mode of construction; they would also offer immense facilities for artificial warming; a house built of iron would always be worth so much per pound when done with; much space would be saved in towns; and the great modern difficulty of covering large spaces architecturally—a difficulty which is generally but vainly supposed to be got rid of by combining the two utterly diverse ideas of *roof* and *ceiling*—would be at once overcome by the properties of the material in question.

In conclusion, let us heartily recommend the "Stones of Venice" to the best attention as well of the general reader as of the architectural student. Though we differ from Mr. Ruskin in several significant points, we are compelled to confess that we have learned far more from his books concerning the very essence and heart of architecture, than we have learned from any other works whatever. No one can be *indifferent* to what he has written upon the subject. Those who do not care for the subject itself, must be delighted and carried along without weariness, by the charms of his way of writing, and will be continually instructed by the wise and witty sayings which are scattered through this and all other of his books; and which are capable of applications as wide as the whole world of art and morals. What Mr. Ruskin says of the conditions of a capacity to enjoy good architecture, is in great measure true of the tone of mind with which one ought to enter upon the perusal of his bold and genial discourses.

"It needs some little care to try experiments on yourself; it needs deliberate question and upright answer. But there is no difficulty to be overcome, no abstruse reasoning to be gone into; only a little watchfulness needed, and thoughtfulness, and so much honesty as will enable you to confess to yourself, and to all men, that you enjoy things, though great authorities say you should not. This looks somewhat like pride; but it is true humility, a trust that you have been so created as to enjoy what is fitting for you, and a willingness to be pleased as it was intended that you should be. It is the child's spirit which we are then most happy when we most recover; only wiser than children in that we are ready to think it subject of thankfulness that we can still be pleased with a fair colour or a dancing light."

- ART. VIII.—1. *Delle Cinque Piaghe della Santa Chiesa : trattato dedicato al Clero Cattolico.* Di ANTONIO ROSMINI. Perugia, 1849.
2. *Discorso Funebre pei Morti di Vienna, recitato il giorno 27 Novembre nella insigne Chiesa di S. Andrea della Valle dal Rmo. P. D. GIOACHIMO VENTURA.* Roma, 1848.
3. *Lettere Storico-Critiche intorno alle Cinque Piaghe della Santa Chiesa del Chiarissimo Sacerdote D. Antonio de Rosmini-Serbati.* Dal P. A. THEINER. (Tradotte in Italiano.) Napoli, 1849.
4. *Legge Siccardi sull' Abolizione del Foro e delle Immunità Ecclesiastiche. Tornate del Parlamento Sub-Alpino.* Vol. unico. Torino, 1850.
5. *L'Italie Rouge, ou Histoire des Révolutions de Rome, Naples, Palerme, Messine, Florence, Parme, Modène, Turin, Milan, Venise ; depuis l'avènement du Pape Pie IX., en Juin 1846, jusqu'à sa rentrée dans sa capitale, en Avril 1850.* Par le VTE. D'ARLINCOURT. Paris, 1850.
6. *Principi della Scuola Rosminiana : da un Prete Bolognese.* 2 vol. Milano, 1851.
7. *La Civiltà Cattolica.* Vol. i. : Napoli, 1850. Vol. ii.-iv. : Roma, 1850-1851.

ROME is *par excellence* the city of ceremonies. Its very religion consists in grand theatrical displays, and its people seem never wearied in "turning out," whether to the blessing of animals on the Festival of St. Anthony, or the *Via Crucis* in the Flavian Amphitheatre—to the buffoonery of the Carnival, or the solemn mysteries of the Sistine Chapel. On the 27th of November 1848, when the assassination of Count Rossi and the flight of the Pope were still the town-talk, "the great attraction" was the Church of St. Andrea della Valle. The magnificent sanctuary of the Theatines was lighted up for a gorgeous ceremony, and solemn mass was said for the repose of the souls of "the brave" who had fallen in the great insurrection of Vienna. It was not a day to be lost in "wondering after" the Four Evangelists of Domenichino, or in gazing up into the painted glories of Lanfranco's cupola—the most beautiful in Rome: politics were in the ascendant, and a spirit-stirring discourse was expected from the most eloquent of Roman orators.

"Consedere duces, vulgique stante corona,
Surgit ad hos clypei dominus septemplicis Ajax."

The Very Reverend Father Gioachimo Ventura, Ex-General

of the Regular Clergy, Counsellor of the Sacred Congregation of Rites, Examiner of the Bishops and of the Roman Clergy, mounted the pulpit, and read his text from the Vulgate: "*Montes Gelboe, nec ros, nec pluvia veniant super vos: quia ibi abjectus est clypeus fortium. . . . Quomodo ceciderunt fortes in praelio!*" 2 Regum i. 21-25.

The preacher began:—"At the sight of the pious ceremony, of the sacred expiatory rite performed here to-day for the souls of the brave fallen in the capital of Austria in combat for liberty, the implacable enemies of all political liberty, the malignant detractors of every popular movement will not fail to say that we wish to-day in Rome to absolve rebellion, to legitimate treason, to sanctify anarchy: and with an air of holy indignation and of saintly sorrow, they will exclaim in more places than one, O diabolical abuse of things sacred! O profanation! O scandal! O sacrilege!" After a few sentences he proceeds to announce his divisions after a somewhat peculiar formula:—"To the confusion of knaves, to the instruction of the simple, to the encouragement of the generous, to the edification of the pious, I undertake to examine to-day the true causes of the great war which has been lately waged at Vienna and elsewhere: *Quomodo ceciderunt fortes in praelio*: to conclude from hence that the proud heights of Absolutism, the scene of the slaughter of the brave, have with justice incurred the anathemas which David pronounced on the mountains of Gilboa, and that the heroes who have fallen there have well merited of religion: *Montes Gelboe, nec ros, nec pluvia veniant super vos, quia ibi abjectus est clypeus fortium*. In two words, I shall shew you that the cause of liberty is truly the cause of religion, and therefore that all those who have died fighting for liberty have a right to the suffrage, to the prayers, to the praise of religion. Let us begin."

Here was preaching for the million! Father Ventura's principle was, that the clergy, instead of confining themselves to the breviary and to their spiritual duties, should frequent the clubs, mingle with the civic guard, and imitate the French clergy, who at once became republican on the 22d of February, and blessed the trees of liberty in the streets of Paris. St. Bernard and St. Thomas, he argued, were ecclesiastics, but did not abstain from politics. The people were marching towards liberty, civil and religious, and if the Church did not march along with them they would march without her—against her. He pleaded for the liberty, fraternity, and equality of the French Republic. "The Christian people should be guided and governed as *persons*, not ruled as *things*: *Principes gentium dominantur eorum, vos autem non sic*. The sovereign is the minister, the servant of his subjects, and command is not a privilege, but a servitude:

qui major est inter vos erit omnium minister. The *Costituente*, he held, would even emancipate the Church, now so thoroughly under the control of the civil power; and the nomination of the bishops and pastors of the Church, so long usurped by the secular governments, would return to the clergy and the people. The Theatine Father then went on to paint in the darkest colours the "Macchiavellian, atrocious, and infernal" policy of Austria, enslaving the Church, and using the clergy only as a black police: corrupting the morals of the people on very purpose that in the voluptuousness of the royal city they might lose all that was noble and daring, and hence dangerous to their despots: encouraging the feuds of rival races, and setting them to fight each other on the old principle of *Divide et impera*: hounding the peasantry, like hungry dogs, on the proprietors, and paying the heads of the latter at ten florins a piece! Such had been the Aulic policy; and the solemn mass said that day in Rome was in suffrage of the souls of the valiant youths who, in heroic attempt to overthrow the infernal system, had fallen in the eight days' insurrection at Vienna. To unite the Church in wedlock with democracy, to restore *that* Pius IX., who had protested against the occupation of Ferrara, from the influence of the retrogrades and *Oscurantisti*, and to lead him back again to that course of reform which he had himself begun, seemed to Padre Ventura the only mode of preserving, in days like the present, the influence of the Church.*

The Theatine Father had risen into high reputation as the most eloquent preacher in Rome: a fitting person to preach a funeral oration on the death of O'Connell, or to sing a hymn of victory over the barricades of Vienna. He had, moreover, like most of his class, a strong inclination to exhibit himself in print in panegyrics, funeral orations, biographies, and homilies; his most celebrated books being "The School of Miracles," a series of homilies preached in the Vatican during the Quaresima of 1843; "The Beauties of Faith," or the felicity of belonging to the true Church; and "The Mother of God, Mother of Men; or, an Exposition of the Mystery of Most Holy Mary at the foot of the Cross," a kind of "Stabat Mater" in prose. During the reforming days of "the simple Pius" he was in high favour with the Pope, and in precisely the reverse with the Cardinals;

* *Discorso Funebre pei Morti di Vienna.* The Discourse was printed "con permesso per la parte religiosa;" and with the extreme of Italian *gentilezza*, the censors sent back the message to the very reverend writer, "*Nella cose del Padre Ventura non si può metter pecco!*" It was, however, in due time put into the Index of Prohibited Books by the Sacred Congregation at Gaeta, and the Theatine Father, smitten by ecclesiastical censure, humbly read his recantation. Alas for the preacher, whose eloquent discourse may have "instructed the simple," but had not, unfortunately, "confounded knaves!"

so much so that his frequent visits to the Quirinal were looked on as a sort of public calamity; and if any one inquired on such occasions, "Chi ci sta dentro?" the answer was more energetic than refined, "Ci sta quel diavolo del Padre Ventura!" But the Father comforted himself with the knowledge that he possessed the confidence of the Roman populace, who had declared that they would have faith in the Pope as long as they knew that Father Ventura was permitted to mount the stairs of the Monte Cavallo.

We should follow the eloquent Theatine's account of the slavery of the Church under Catholic princes, but he himself refers to a much fuller development of that subject from another quarter,—the "Cinque Piaghe" of the Abbate Rosmini. Immeasurably above the orator of St. Andrea della Valle in intellect and learning, Antonio Rosmini-Serbati had acquired a name second to none in the Italian priesthood—as high, if not higher, than that of Gioberti. It is true the Turinese philosopher had come forward prominently on the great and stirring political questions of the day, had become the idol of the populace, and had been *fêted* beyond all precedent, and as yet the charm of his name was unbroken. The "Primacy" and "the Modern Jesuit" had struck the right cord, and programmes of reform that came thick and fast from Turin had made Gioberti the great ecclesiastical head of the Italian movement when Pius IX. had ceased to be a reformer. Rosmini was simply an ecclesiastic, a modest man of letters, and though his strong sympathy with the Liberal movement was well known, no Italian priest kept his place with more gravity and dignity than he did. We do not mean to refer at length to the fifteen dense octavo volumes by which he had acquired so high a name as a philosopher and a moralist. As to his "Ideology, or New Essay on the origin of Ideas," in three elaborate volumes, and his "Moral Philosophy," treating of the principles of Moral Science, of Anthropology, and of Conscience, in a form equally elaborate; it may be sufficient to say that Gioberti has published the orthodox number of three octavos with the ominous title, "Philosophical Errors of Antonio Rosmini-Serbati," but at present we have no wish to ring the changes on Locke and Reid, on Cousin and Kant. His "Ascetics" and "Ecclesiastical Prose" were a proper study for the priests: his "Teodicea" was too grave a subject for a season of revolution; but some smaller works, dealing with matters that came more directly home "to men's bosoms and business," had been printed and reprinted in almost every part of Italy. In the end of August 1848, Rosmini was sent to Rome to negotiate on the part of the Piedmontese Government that Italian League which had been proposed by the Pope. The time

was unpropitious. The Allocution of April—Durando's tricolored crosses—the Armistice of Milan—were fresh in every one's mind, and Rome and Piedmont mutually accused each other of the recent failure in Lombardy. Rosmini was unsuccessful in his negotiations, but personally he was held in high esteem by the Pontiff. A party among the clergy accused him of holding dangerous opinions, especially expressed in his "Cinque Piaghe:" but not only were his opinions at that time not condemned, but he was himself appointed consulter of the Sacred Congregation of the Holy Office and of the Index, and even nominated to the high honour of the purple. It was also rumoured that he would soon be appointed Minister of Public Instruction, an office for which he was certainly as well qualified as the old Cardinal Mezzofanti had been, notwithstanding his thirty languages. But Rosmini was not doomed to be a Cardinal. The Fabbri Ministry crumbled as the Mamiani Cabinet had done before it, and the ill-fated Rossi succeeded to all the honour and all the danger of upholding the throne of two hundred and sixty Popes. The "Contemporaneo" launched its thunders, if such they could be called, against the friend of Guizot; the "Epoca" set itself in opposition, and "Don Pirlone," with his caricatures and his buffoonery—for Pasquin had ceased to be exclusively the *Punch* of Rome—was true to the popular party, and ranged himself on the winning side. Rossi's attempted reform of the law, roused against him the whole tribe that depended on a corrupt administration. The riotous proceedings in Tuscany—the descent of Garibaldi into the Papal territories—the preaching of Father Gavazzi, the mob-orator of the republicans—the violent articles of the journals—increased the excitement of the Roman factions against the unfortunate minister, till the dagger of the assassin was held up in triumph on the steps of the Cancellaria, and the dregs of Rome kept holiday for a murder.

We can judge the assassination of Count Rossi in no other way than as one of the darkest crimes that ever stained even the dark annals of Rome. In the dense crowd that thronged the stairs of the Cancellaria, and closed around the victim, there were wretches in military disguise and armed with daggers, who looked on with Satanic triumph while the blood gurgled from the neck of the dying minister. The civic guard and carabinieri raised not an arm—the poltroons of the Council Hall made an ineffectual attempt to read the minutes of the last session, as if nothing serious had happened—without, all was in confusion. On the next day the Quirinal was besieged, and the Pope compelled to treat with Galletti, the popular hero, the amnestied of St. Angelo, for the formation of a new ministry. Galletti, as a matter of course, proposed himself as a fit and proper person for

the Ministry of the Interior ; Mamiani, as Minister of Foreign Affairs ; Sterbini, the ruler of the " Circoli," as Minister of Commerce and Public works ; and, not to speak of others, he named Rosmini as Minister of Public Instruction and President of the Council. It is pleasing to say, that both Rosmini and Count Mamiani refused to accept office in the Cabinet extemporized by Galletti, and conceded by a sovereign who was not in a condition to refuse anything. Seven days after the Pope had reversed his own medal, *Non relinquam vos orphanos*.

We would gladly follow that romantic gentleman, the Viscount d'Arlincourt, in his account of the midnight flight in Bianchone's *voiture*, on through the Pontine Marshes, and onward still till the Neapolitan frontier was crossed, and the disguised Abbé, (for the Viscount ignores the scandal of the Bavarian footman,) now manifest as Pius IX., pressed to his heart the silver box in which his predecessor Braschi had carried with him the consecrated host in his exile, and murmured " tout bas un Te Deum en actions de grâce de sa délivrance." But it is time to return to Rosmini.

The history of Rosmini's treatise on Ecclesiastical Reform is instructive. It was begun in 1832, and completed in the year following. " The times did not then seem propitious" for publishing on such a subject, and like one of the seven sleepers of Ephesus, the forgotten treatise slumbered peacefully for thirteen years, to wake up at the accession of a Pontiff, who seemed destined to introduce " a new era" for the Church and the world. To write at all of such a subject as " the Wounds of the Holy Church," was not to be thought of lightly. Was not this a subject for the Bishops, or for the Sovereign Pontiff, rather than for a simple Abbate ? Yes, truly ; but the bishops and the Pope are busily occupied, or ought to be so, and have not much leisure for quiet meditation ; and it is a service done to them to bring such a subject before them, or at least, they ought to consider it as such, for, unfortunately, the ontology and the deontology of such questions do not always harmonize at Rome. And then, besides, St. Jerome, St. Bernard, and St. Catherine of Sienna, who were not bishops, both spoke and wrote on the evils and the reform of the Church in their day. As a proof that abuses exist in the Church, and that reform may be proposed without incurring the charge of heresy, Rosmini refers to the celebrated Bologna Commission of 1537, appointed by Paul III., to search out all the abuses of the Church, and to submit them to the Pontiff. At the head of this commission were the cardinals Contarini, Caraffa, Sadolet, and Pole. Now, it may be worth while to pause a moment on the history of that commission, which has been rather unfortunately evoked as a precedent. The prime mover

in the matter was Caraffa, the Theatine cardinal whom Erasmus had praised in such fulsome terms in the dedication of his edition of Jerome in 1516. The commission specified as abuses the sale of benefices, the disposition of them by testament, the union of bishoprics, and the admission of improper persons to the priesthood, and gave some very proper advice on these matters. Five years after the Bologna meeting, Caraffa, the mild reformer of abuses, was heading the crusade against heresy, and plying throughout Italy the infernal enginery of the Spanish Inquisition, which ceased not its deeds of darkness till Rome had gained the mastery over the fallen faith. And when Caraffa himself ascended the papal throne as Paul IV., he put *his own advice* into the Expurgatory Index. He had certainly a precedent in the conduct of his predecessor, Pius II., who strongly censured, when he became a pope, all the liberal opinions which he had expressed when he was simply Æneas Sylvius. "Reject Æneas," he said, "receive Pius. The former name was imposed by my parents—a Gentile name—and in my infancy; the other I assumed as a Christian in my apostolate!" The Bologna council of cardinals and bishops recommended as a necessary reform, the prohibition of the Colloquies of Erasmus as a school-book. Luther wrote over against this part of the advice, "Would God he had been living!" for no one enjoyed more than Luther did the genial humour, and the polished or unpolished ridicule of the *Punch* of the Reformation.

All such damaging stories are, however, "ignored" by all true churchmen. Rosmini's book was printed, reprinted, and applauded; but in due time the Sacred Congregation of Gaeta entered it on the Index—and no wonder, for Pius IX. was then repudiating his own reforms as the fruit of "a revolutionary spirit."

We choose this treatise of Rosmini, rather than any other, as the text of our present notice of ecclesiastical affairs in Italy, not only on account of the high name of Rosmini, but also because no Italian ecclesiastic, not even Gioberti, has more directly entered on the great subject of the abuses of the Church. We shall not waste time in observing the priestly character of the "Cinque Piaghe," as exhibited in divisions that to our northern imaginations seem somewhat fantastic; but we have not been taught to kneel to a crucifix of Giotto or Donatello, and the pulpits from which we have been instructed were not sculptured in marble by the Pisani, and hence we may allow the *structure* of the treatise to pass unchallenged.

I. The author speaks first of the Wound of the Left Hand of the Holy Church, which is *the division of the people from the clergy in public worship*. He does not mean by this a separation in

heart and spirit, but the want of actual union, which arises when the people do not understand the prayers and services of the Church. The *mission* of the gospel was to subdue the whole man to the law of God: the means were the preaching of the word, the administration of the sacraments, and prayer. With these simple agencies the sent of Christ were to regenerate the world. "The apostles and their successors, who added to the few sacraments instituted by Christ the ornaments of holy prayers, of ceremonies, of outward signs, and of noble rites, that the public worship of the Redeemer of men might be more serviceable to the honour of the God-man, and to the assembly of those who believed in his word, followed, in doing this, the example given by their divine master, that is, they introduced nothing into the temple devoid of signification," p. 14. These ceremonies or sacramentals added by the Church to that simple form of worship instituted by Christ, have not only, he holds, their proper signification, but also participate in the vivifying power of the sacraments. The conclusion is right though the syllogism is wrong; in this public worship of God, the people are not meant to be mere spectators of a sacred representation, as if present at a show, but should themselves take part in the service with the understanding and the heart. We need not follow the eloquent argument by which Rosmini establishes the great principle, that the prayers which the faithful unite in offering up at the throne of grace should be understood of all. The unity of Christian worshippers is not material but spiritual, a union of understanding and of feeling. But this union has ceased to exist, and a wall of separation arises between the clergy and the people.

The principle enunciated is an extremely simple one, but the reform to which it points would strike at the whole system of Romish worship. The Church, in Roman Catholic Christendom, has adorned herself with the trappings of Pagan superstition; the very temples body forth the symbolism of the east accommodated to a Christian creed, and the heresies of centuries have been wrought into their walls. A Romish church is not a mere building in which worshippers may meet for the service of God, it is an apocalypse of mediæval mysteries. Its walls are sculptured over with angels, and prophets, and apostles, or with symbolical animals, "the mythological menagerie" of the east and west; its niches and cupolas tell over again the lying legends and fabulous histories of the breviary and of the lives of the saints; statues, Pagan or Christian, from Phidias to Canova, and pictures from "St. Luke" to Raphael, form its appropriate decorations. It is vain to treat such things as mere artistic ornaments—they are suited to no creed but one; and the ecclesiological experiment of the English tractarians is a proof that their

influence is not imaginary. In truth, it has been well said, that "the study of ancient church architecture is an admirable preparative for the old faith." But apart from this, the whole service is a mere theatrical display. A profusion of tapers burning before an altar, gorgeous in its decorations, or tricked out in the most tawdry finery—priests in showy vestments mumbling an unintelligible mass—crossings, kneelings, a repeated kissing of the altar—the ringing of bells and the music—the smoke of the incense, and the dipping of the finger in the holy water—make up the whole service. The right word to express it is "mummery," were it not for the melancholy reflection that this empty show is made to pass for the worship of Him who requires worship from his servants "in spirit and in truth."

It is well, in these days of Popish controversy, to be able to cite the testimony of a Romish ecclesiastic on this matter of "mummery." Rosmini gives the two causes of this separation of the laity from the clergy in the public worship of the Church, which he deplures as the first of the Church's wounds. In the first place, the people are not instructed in the Christian faith. They are kept in ignorance, as if ignorance were better for them than knowledge, or as if they were not fit to receive the sublime truths of the Gospel, in direct opposition to the command of him who said, "Go and teach all nations." Something more is necessary than an instruction in catechisms and formulas, repeated without being understood. These symbols of the Church must be expounded at length till they reach the understanding and the heart. A catechism may be committed to memory, and the most exact words of the creed may be repeated in answer to set questions; and yet all this may be a mere exercise of memory, leaving "the instructed" as profoundly ignorant after his instruction as he was before it. And hence, the question is proposed as at least a legitimate one, whether the catechisms of the Church have not done more harm than good? The second reason is an important one. The Latin tongue, which the Roman arms had carried to the ends of the earth, became naturally the common language of the Church in teaching her doctrines and offering her prayers; but the language of the Church has ceased to be a spoken language, and by her absurd persistence in the use of a dead tongue, "he that occupieth the place of the unlearned cannot say, amen," and in the very church of his own city is like a pilgrim in a strange land, where the words that are spoken are to him devoid of all signification. Hence the carelessness of the people for the services of the Church, which are all unintelligible, and in which they could be only materially present, without any spiritual understanding—present as the statues and pillars of the temple." And he adds, "this repugnance to frequent the

Christian churches becomes an unjust reason by which human indiscretion has often drawn to a sense so strange and so far from the truth, that *compelle intrare* of the Redeemer," p. 20.

The Romish system is stereotyped, and it is in short impossible to effect any change without destroying the monuments which infallible builders reared "in perpetuam rei memoriam." And yet within the narrow limits allowed by her unchanging rubric, the Church has made some stray efforts at accommodation. The *Oratoires* and the *Marian congregations* were instituted that the Church might not always speak as a barbarian in the most solemn acts of her worship. In such a country as Protestant England, so deeply infected with the great Lutheran heresy of the right of free inquiry, even cardinals must *preach*; but the religious population of such a state as Naples are content with a hasty mass, that they may hurry off to the more entertaining exhibitions of Policinella. Preaching is not the business of an Italian priest, and we suppose not more than one out of every five hundred that darken the streets of the Italian cities ever ascends a pulpit. The great preaching season is during the forty days of Lent, and a few monks are selected as the preachers of the stated course of forty sermons, and duly inflict their *Quaresi-male* on their audience. They are generally deplorably illiterate, but the stock of forty sermons once prepared, the preacher is furnished for a lifetime. In the selection of subjects, with the exception of four discourses, "the world is all before him where to choose," and of late years the pernicious principles of Protestantism and the unmingled evils of Bible Societies have been favourite topics with the shaven orator. But preach what he may, he must wind up with "the four last things," Judgment, Hell, Purgatory, and Paradise, and "do" the Divine Comedy into homilies. The pulpit is on the whole a somewhat useless ornament of an Italian church, and in most cases might be removed entirely: the great service is the sacrifice at the altar, and the muttered mass in Latin. The worshippers look on, or kneel, or read such books as "the Garden of the Soul" and "the Way of Paradise." We have been somewhat interested with two little volumes lately published by Rosmini.* The one is a catechism, in which the doctrines of the Church are developed "according to the order of ideas," and with much ability; for however much he may be hampered by a system which he has not light enough to abjure, it is not in Rosmini that one will find the grossness of a Liguori. The other is a collection of prayers and instructions, to enable the wor-

* *Operette Spirituali* di A. Rosmini-Serbati. 2 vols. Pp. 640.

shipper to accompany intelligently the service of the Mass, and certainly few Italian priests have ever edited such a series of prayers for the use of the unlearned : they are a translation of some of the finest Psalms of David, with a few notes from the Fathers, to give an air of orthodoxy to the volume. Even such an approach to the Bible in the vulgar tongue is suspicious, and some will not willingly sanction more, and for the sake of appearances Rosmini has appended an exposition of the Hymn of the Virgin Mary. Jansenism, or the tendency to Jansenism, is not more highly favoured now by the princes of the Church than it was in the days of the Port-Royal. The priestly caste, with laws and customs, and a language of their own, must be preserved as a separate society.

II. The second great evil, or as Rosmini describes it—the Wound of the Right Hand of the Holy Church—is *the insufficient education of the clergy*. We shall condense the substance of this section of the treatise, preserving the outline and following the train of thought of the learned Abbate. In the first ages of the Church, preaching and the services of public worship were the great schools of the Christian people, in which “by word and sacrament” the great truths of religion were brought home to the hearts of the believing. The first teachers appealed not only to the intellectual, but to the moral man—not only to the head but to the heart : and the priests of the new religion chosen from among the faithful, and raised to the high honour of the Christian ministry, felt all the solemnity of their holy office, when a simple layman, untaught in “the schools of the prophets,” but taught of the Spirit, was called by the voice of the people to the oversight of the flock, and refusing in vain, became a burning and shining light, a St. Ambrose or a St. Martin. As were the people, so were the priests who issued from the people. And now look at the Church in our day : still the rule holds, “like people like priests.” The people now are present at the services and ceremonies of the Church, as spectators at a show ; there is no clear understanding of the duty and the dignity of membership in the body of Christ—no union of mind and heart with the clergy, so that both may prostrate themselves with a common feeling before Him with whom they have to do. The clergy are rather regarded as a peculiar and privileged class, living by the altar—a caste and a sect apart from others, and separated from the great body of the faithful. Hence the affairs of the Church are spoken of as the affairs of the priests : and from a Christian laity so ill-taught and so ignorant of the spiritualities of their religion, issue the priests, bringing with them the meagreness of instruction gained in such a school, and that secular spirit which

still lurks under the black robe—ignorant alike of lay Christianity and of Christian priesthood, and of the bond by which they are united. These narrow-minded priests communicate to others who are to succeed them the slender stream of their instruction, and they again to others, and so the process of deterioration goes on, for “the disciple is not above his master.”

A second reason of this insufficient education is the giving over of the instruction of the clergy to men unfitted for their office. In the earlier days the bishops were the teachers: Athanasius grew up under the shadow of Alexander, a scholar worthy of the master; Irenæus had learned from Polycarp, and Polycarp from John. Brought up at the feet of the Apostles, the Timothies and Tituses were prepared to carry on the work of winning souls to Christ. Thus from one race of pastors to another the truth was handed down, and the bond of union between the members of the Church preserved: *the distinctions of higher and lower clergy were then unknown*; the bishop was himself the teacher. The instruction of the people was rarely committed to other hands, except in cases of extraordinary genius and sanctity in the person chosen to the vicarious duty,—as when Chrysostom was chosen preacher by Flavian of Antioch, or Augustine by Valerius of Carthage; and much less the duty of teaching the teachers.

In the sixth century, the position of the clergy was changed. They were no longer poor and persecuted; they had issued from the catacombs and the arena; they were loaded with secular duties, and involved in secular business, so much that Origen warned the priests against the danger of becoming priests of Pharaoh,—holding lands and occupied in earthly things rather than priests of the Lord; and Gregory the Great complained that under the name of the Episcopate he had returned to the world, and had more secular affairs on hand as a priest than ever he had had as a layman. The clergy mingled more and more in secular affairs throughout the middle ages, and while kings were advancing in devotion to the Church, so that monarchs gained at times the titles of saints, the clergy was becoming more and more a secularized community, living with nobles and as nobles, occupied in politics, economy, and secular administration, and devolving on the inferior clergy the duties of feeding the flock. Parishes were instituted, and in the tenth century and onwards, the houses of the bishops were no longer academies for the training of future pastors, but courtly palaces where license was given to the immoralities of the age. The people forgot that the bishop was a pastor. The inferior clergy were no longer on terms of equality and of brotherly fellowship with the bishop, who became more and more separated from all pastoral duty, till

the day came when the cup was full, and the Protestant kingdoms abolished the office which had become so manifestly useless. Influenced by the example of their superiors, the inferior clergy also became ambitious; the drudgery of their pastoral work was valued only for the income it yielded, or the hopes of advancement it held out; the word of God and the sacraments became a spiritual merchandise; and each Judas in the priesthood sold his Lord. Such pastors neglected all teaching, save what referred to benedictions or indulgences, or whatever might increase the revenue of those who lived by the altar; and so degraded did the clergy become, that restrictive laws and legal means were employed to check the evil—means which could only prevent its growth for a time, but could never reach its root. The day came at last when the Church was punished for her sin: kingdoms and nations abandoned the Church which had before abandoned them to the leading of blind guides, and the lands and endowments which the clergy had sought as their chief good, were in one moment taken from them. The Church, spoiled of her ill-gotten wealth, roused herself to some effort to regain her position; but the bishops of that day, instead of returning to the good customs of the early Church in training the clergy, through whom they were to retain or regain their hold on the nations, still kept aloof from their proper work, and contented themselves with a wholly inadequate reform. In fine, seminaries were chosen as the means of providing for the education of the clergy. The teachers of the seminaries were generally inferior men, and besides, were soon removed to some poor benefice; and others, all inexperienced, put in their stead. Such are the teachers of the Church now, and the scanty education of the seminary becomes a mere exercise of memory. Well may Rosmini add, How unlike the description which Clement of Alexandria gives of his master—"a bee that sucked the flowers of prophetic and apostolic meadows, that he might form in the souls of those who heard him the honey of a sincere and uncorrupted knowledge!" And to this poor task of teaching the rising generation of the teachers of the Church, is attached an income so scanty, that a promotion to some poor benefice causes the happy professor to leap for joy!

Another cause of this insufficient education is the use of mere elementary books. The books of elaborate learning, full of doctrine and of wisdom, are compressed into miserable compendiums. "In the early ages of the Church, the Sacred Scriptures were the only text of popular and ecclesiastical instruction—the Scriptures, which are truly *the book* of the human race—the *Bible*—the *Scripture* by Autonomasia. Such a code paints humanity from its beginning to its end;"—and so on, for space

does not permit us to quote at length Rosmini's eloquent eulogium of the Book of God, pp. 38, 39. The imprisoned Bibles of Italy in the present day suggest a sad comment on the words of the earnest writer :—"This great book, in the hands of great men who expounded it, was the nutriment of other great men." Hence the pastors of the Church were also the great writers of antiquity, except in rare cases where genius opened to a Tertullian or an Origen the way to the chair of Christian instruction. These books of the early fathers served in their turn for the education of the clergy, and most of all in leading them to the one Book in which every question is solved that regards man's salvation. Ages of feebleness followed, when the ecclesiastical writers, chiefly shut up in monasteries, spent their days over the pages of the Fathers, copying, copying perpetually, an Augustine or a Jerome, compiling, abbreviating, condensing, and compressing into miserable sentences the wisdom of the princes of the Church. This system had its advantages : it preserved the writings of the Church by those endless copies of the monks ; but it was also accompanied with great evils. The minds of men were chained down to what others had said, and such studies had more to do with the intellect and memory than with the heart and conscience. These were the scholastic ages, the ages of compendiums and summaries, when Peter Lombard compiled his "Sentences," and Thomas Aquinas wrote his "Summa." The wisdom of the Fathers was epitomized, and the living pages of the early writers were abbreviated into hard, dry, and lifeless formulas. It was in keeping with the spirit of such an age, that, in philosophy, Plato, the favourite of the ancients, was abandoned for the more sapless Aristotle. This scholasticism reached its climax in Thomas Aquinas, and then other centuries of mediocrity followed, when the schoolmen who had abbreviated the Fathers were themselves abbreviated. Such has been the progress of deterioration : the Fathers succeeded to the Scriptures, the schoolmen condensed and epitomized the Fathers, and, lastly, the theologians came with their miserable compendiums and selections—books made out of books—"books without spirit, without principle, without eloquence, without method"—books that can awaken no sentiment, kindle no genius, excite no fancy, and that need in their teachers and scholars nothing more than eyes and ears.

We have thought it right to present in outline the thoroughly Jansenist principles of this section of Rosmini's work. But the position of the Jansenists, half-way between Rome and the Reformation, must ever be a false one. Theories that would divest the Pope of his assumed infallibility and lordship over his brethren, and of the substantial advantages of his temporal

power, can scarcely consist with adherence to a Church which stipulates these points as articles of faith. The learning of Arnauld and the wit of Pascal, joined with that purity of morals which formed such a contrast to the maxims and the practice of a dissolute age, were not able to save the Port-Royal. All the enlightened men of Italy hold principles akin to those of Rosmini, though few have so well expressed them; but they are not prepared to break with the historic church. They do not hold the infallibility of the Supreme Pontiff, however cautious they may be in assailing a hallowed superstition; the temporal power of the Popes is no part of their creed, however they may differ in their ideas of the propriety of retaining for St. Peter's see, or appropriating to secular purposes, the accumulated "donations" of twelve centuries. The privileged tribunals and right of asylum belong to things abolished. They do not believe that the existence of the Church depends on holding lands in mortmain; they admit abuses, and deplore them: but the great principle of the Reformation has not prevailed to shake their historic attachment to the system of religion which has its home in Italy, and its seat on the seven hills. There are exceptions, as we know, but we speak of the general feeling of the more educated classes. They would reform the Church, but this is precisely the one thing that they cannot accomplish; and the tenacity with which the authorities of the Church hold fast their abuses has done more, and is doing more, than any other agency to alienate men from a system which knows no change, and admits of no reformation. The great historic demonstration of five years has wrought a wondrous revolution of sentiment, and to satisfy the present requirements of a people so far enlightened, some change is needed. Uncomplying and obstinate, the Church is gathering herself up for desperate resistance, and for a determined effort to prevail by force. She has leagued herself with the old despotisms of Europe, and made the police the right arm of her strength; she has plied her Index and her Inquisition, and closed her gates against the merchandise of truth; she has recalled the Jesuits to Rome, as her firmest friends and ablest defenders, and laid under ban the very men whose more liberal views had conciliated her more wavering adherents or commanded the respect of her enemies. "The day will declare" the end and issue of this "strong delusion."

The work of her clergy is not that of enlightening the mind, and of convincing the heart by great Bible principles. The education of the priests is such as Rosmini has described it, and much worse than he has described it; but we are content at present to abide by his account, which cannot be suspected of

exaggeration. They are not preachers, for their work is to go through a formal service in a language unintelligible to the people; schooled in their sapless books, and living apart from the earnest practical work of a gospel ministry, they are not labourers for Christ like the early teachers; they are mere intellectual machines, or machines *not* intellectual. But if the clergy were to be brought back to the primitive standard, "in this way there would be few priests. Well, even so. Pray ye therefore the Lord of the harvest that he may send forth reapers into his harvest."

It is needless to say that we are not discussing the great question of Romanism and the Reformation, but simply sketching some of the evils of the Romish Church as one of her own adherents has presented them. Hence we must not be held as "homologating" the opinions of Rosmini as to the kind or measure of reform that is needed. We hold rather the impossibility of reforming the Romish system; for its lofty assumption of infallibility precludes all change, and the great Protestant principle gaining fast on the Church from without is destructive to the elements of strength and weakness by which her creed has been supported. According to the defenders of the Church, the great vitiating principle of modern society is Protestantism. The revolt of Luther, founded on the emancipation of reason and conscience, opened a new era in the history of the world. The Council of Trent, the last of the councils, closed the history of the middle ages, and with defined dogmas the old Church that had once been all-powerful stood henceforth on the defensive. The Protestant principle, in one form or another, has been since leavening society, and, both in religion and politics, the Church is striving hard against its influence. The right or the responsibility of private judgment on the one hand, with freedom of conscience, the right of worship, the liberty of the press, and constitutional government embodying the principle of representation—such are the great ideas of the one party; antiquity in philosophy, authority in the Church, and absolutism in government, are the leading principles of the other. The Papacy, holding both spiritual and temporal power, embodies all these elements, and to *modernize* it is impossible. It must stand or fall with its canon law and the decrees of its mediæval councils. The freedom of the press—the unrestrained circulation of the Bible—an enlightened education, and representative government,—the Church knows well would be fatal to her influence in Italy; and hundreds of the Italian priests are no way in advance of that Dominican father who enlightened his Florentine audience more than two centuries ago, in the Church of Santa Maria Novella, on the astronomical heresy of Galileo,

drawing both his text and his condemnation from those words of the Vulgate, "*Viri Galilæi, quid statis aspicientes in cælum?*"

III. But it is time to pass on to the third evil, or as Rosmini calls it—the Wound of the Side of the Holy Church, viz., *the disunion of the bishops*. Now, the Romish Church plumes herself on her unity, on her having and holding one Lord, one faith, one baptism. In the earlier ages of the Church, Rosmini's *Saturnia regna*, bishop visited bishop, or corresponded by letter: in provincial councils presbyters consulted together, and, besides, the pastors consulted with the congregations of the people. According to Rosmini's statement, and he cites his favourite authority Fleury in proof, for six centuries after the Christian era, if a pastor was refused by a congregation, no effort was made to force his services on the people; and he cites a higher authority than Fleury for consulting the members of the Church, even the example of the apostles in the election of deacons. But we need not speak of the "rings of gold" that bound together the earlier Episcopate. The time came when the clergy, involved in secular business, precisely reversed the rule of the apostles, who would not leave the duties of prayer and the ministry of the word to serve tables. Temporal honours became the sources of discord and division. The rich see of Constantinople, the new Rome on the Bosphorus, rivalled both in its secular and ecclesiastical relations the old Rome on the Tiber, and the increasing temporal influence of the Byzantine rival ended in the Greek schism by which the east was lost to the Church. The Archbishops in the Exarchate of Ravenna disobeyed the Popes: Anti-popes arose, and again there was the schism of the west. The councils of Pisa, Constance, and Basle—the defection of the north in the sixteenth century—the Gallican Liberties—the Aulic influences to which the Church was subjected, and the control assumed by emperors and grand-dukes—all belong to times when the Church had "benefices" to contend for, and when it could no longer be said that "he who desired the office of a bishop, desired a good work."

Now, supposing the Romish Church to be *the* Church, a really devoted Romanist, if he follows out his principles logically, must approve of much that the mere eclectic adherent of Rome may plume himself on rejecting. Gioberti, while propounding his great theory of the regeneration of Italy by a reforming Vatican, wrote five volumes against the Society of Jesus, the ablest company that ever the Church sent forth for her defence. This may look like liberality, and Gioberti's fame rests on his magnificent absurdity: but the propounder of two such theories as are embodied respectively in the "Primato" and the "Gesuita Mo-

derno," can have no higher praise than that which attaches to the *splendide mendax*; choosing between the school of Gioberti and the school of Rosmini, we prefer the latter, for however erroneous the application of its principles may be, the principles themselves are not the fine fictions of philosophic dreamers. Rosmini contrasts the secularized bishops with "those apostolic men who, with Loyola at their head, founded a company of indefatigable workmen in the vineyard of the Lord," binding themselves even with vows to avoid the burden of secularities. The institution of Mendicant Friars in the thirteenth century, and of the Regular Clergy in the sixteenth, manifestly aimed at supplying what had been left undone by the clergy which was too truly distinguished as "secular." Whatever in practice they may have been, if Rome be the depository of the truth, the *principle* of the Society of Jesus cannot consistently be assailed by an adherent of the Church which they have so powerfully upheld.

The Episcopal Sees, according to Rosmini's faithful picture, were reserved for the flatterers or the servants of the princes, or as livings for younger or illegitimate sons. In the Venetian Republic the younger sons of the patrician houses were the bishops, having been devoted to the Episcopate before they were born; and such being the mode of appointment, they were charitably released from sacred duties, and allowed to lead what life they pleased. Rosmini paints in the darkest colours the infamy of the secularized bishops, and exclaims, "God knoweth, I recite not mere possibilities! Of all that I have written, the horrible examples are in history. They are written there in characters so indelible, that all the bitter tears of the Church, and all the rubbing and polishing of ages, shall never be able to efface them."

The Episcopacy is no longer a distinct and sacred power between the princes and the people: it is absorbed in the temporal power which thus presents two faces to the people, one military, and the other sacerdotal: it has become but a part of the civil magistracy, its interests being national, not Catholic. The Church, whatever its alliance may be, is not a creation of the State, and must preserve its own independence. . . . All Italy—all Europe—has rung with the scandal of Franzoni and the Servite fathers of San Carlo at Turin. The warfare waged so relentlessly at the deathbed of Santa Rosa has kindled, and justly kindled, the indignation of the civilized world, and priestcraft has certainly not gained in that battle. All Piedmont rung to the cry of outraged humanity, and yet, judging both parties by the principles which they hold in common, we suspect the priests had the right side of the question, if we can speak of

a right side in a case where we hold both to have been in the wrong. Granted that the Pontiff is not only a temporal prince, but also head of the Church, whether by Divine right or by the consent of Catholic Christendom, it is a grave question for a Roman Catholic kingdom—whether a concordat, such as that solemnly entered into in 1841, between Charles Albert and Gregory XVI., can be set aside by one of the contracting parties, without the consent of the other? And how can any Roman Catholic, admitting the pretensions of the priesthood, question the principle affirmed by the Pope in the Allocution of November 1850, that the administration of the sacraments belongs not to the civil but to the ecclesiastical power? The Servite fathers were bound to obey their archbishop, and Franzoni had sworn obedience to St. Peter's Chair. Judged on Romish principles, both the prisoner of the Fenestrelle and his rival for the honours of martyrdom, the worthy Marongiu Nurra, Archbishop of Cagliari—*par nobile fratrum*—may have been perfectly right, and as long as nations *will* judge by Romish principles, such cases are likely to recur. The fault lies in the system, and it is needless to cry out against such displays of Romish tyranny, or whatever else it may be called, while the system itself is acknowledged as existing by “right divine.” As long as kingdoms give themselves up bound hand and foot by their concordats into the power of the Court of Rome, and persist in acknowledging the Roman Pontiff as their spiritual head, they must abide the consequences. The only effectual remedy implies the laying of the axe to the root of the tree: and such cases as those of Turin and Cagliari are doing much to open the eyes of the people, however slow the governments may be to learn, or act according to their knowledge.

But the Pope has not a Franzoni in every capital, and the Catholic princes have managed, in general, to keep their bishops in better order. They have gained the battle of investitures, and in the main have perfected the system of clerical subjection. The resistance of the Catholic kingdoms to the Bull *In Coena Domini* is an old story now. In that great Papal manifesto, the universal monarch extended his divine right over kings and governments, and anathematized all who opposed his authority. The princes incurred anathemas by the dozen, and the Venetian Republic ran up her score to thirty-six. And now the Catholic sovereigns submit the decisions of their spiritual head to lay tribunals, without whose sanction Bulls and Letters Apostolic cannot be published in their dominions. In truth, by the confession of Romanists themselves, their Church has far greater liberty in countries that are not Catholic, than in the kingdoms that profess subjection to the Pope. We need not say how com-

pletely the Church was subjected to the civil power in Austria since the time of the Emperor Joseph, till the new laws of the 18th and 23d April 1850, issued by the present Emperor, abolishing the royal *Placet*, and the restrictions of 1781. In Tuscany the Leopoldine Laws have remained in force till the present year, when the "piety," or the weakness, of the Grand Duke has favoured the restless efforts of the Court of Rome to regain as far as may be its old supremacy. Even Naples came in for its full share of periodic denunciation at Rome on account of grievous "aggression" on the rights of the Pope, till Pius IX., after the hospitalities of Gaeta and Portici, felt that he could not with ordinary decency keep up the farce of protesting against his most dutiful and most Christian son, the *Re Bombardatore*. England and America have been held up as examples to the Catholic kingdoms: though it must be acknowledged that the uproar which we have raised against "Papal Aggression" has somewhat damaged our claims to the gratitude of the Holy Father. Still it is to be expected that our Cardinal-Archbishop and his suffragans will walk in the footsteps of "our glorious St. Thomas," and some way or other make it evident that they are no longer in the lamentable position of bishops *in partibus*.

The secular wealth of the clergy has also been a fruitful source of schism. The sequestrating of ecclesiastical property the Church has always held to be sacrilege, and has, as usual, defended herself by excommunications. Rosmini puts the case: Might not the timely giving up of all temporal possessions and honours in the days of Gustavus Vasa, of Frederick I., and of Henry VIII., have saved the authority of the Church in Sweden, in Denmark, and England? The Church aimed at keeping all, and lost her very position—both her possessions and her power sunk together. Such cases are likely to occur again, and the safer course which he indicates is to cast overboard the cargo to save the sinking vessel. The Church is a spiritual society, and must maintain her independence of secular communities in the exercise of her spiritual duties. The principle is right, and would be appropriate if Rome were the true Church of Christ.

IV. The fourth of the evils which Rosmini deploras—or, as he calls it, the "Wound of the Right Foot"—is *lay patronage*, or the abandonment of the nomination of bishops to the lay power. He first establishes the right of the Church to elect her own office-bearers—a right given her, or rather a duty laid upon her, by the great Head of the Church—a right exercised by the Apostles, (Acts xiv. 22,) and by those whom they ordained, (Titus i. 3)—a right which the Church cannot barter nor alienate without yielding that liberty which belongs to those whom the Lord

hath made free. But this right of election belongs not merely to those who have been set in authority, for he states next the great principle of the early Church—*the people were the counselor and the clergy the judge*. He cites St. Leo and a host of fathers and bishops, to shew that the election of bishops, according to the Canons of the Church, belonged to the clergy and the people, and that no pastor was intruded on an unwilling flock. In the Roman Pontifical the ceremony in which the bishop asks of the ordained if they enjoy a good testimony among the faithful still remains, but it remains only as a ceremony. The right of government, of election of office-bearers, of holding councils, and of giving forth decisions in matters of doctrine and discipline according to God's Word, existed unquestionably among the early followers of the Lord: their Master's kingdom was not of this world, and "the Church of the Catacombs" took not her laws from Cæsar. After the conversion of Constantine, when the clergy began to abound in wealth, it became the interest of the emperors to subject them to their power, and hence in Antioch and Constantinople lay patronage was introduced into the Church. First the consent of the lay power was required to every ordination—and this consent grew into the right to nominate—and right to nominate became power to sell the benefices. He traces the long history of the struggle of the Church by her canons and councils against growing Byzantinism, and the gradual subjection of the Church to the secular power. He gives at length the case of the nomination of Odoacre to the Church of Beauvais by Louis III.—his rejection by the Council of Fismes held in 881, under the presidency of Hincmar, Archbishop of Rheims—the intrusion of Odoacre, and his deposition by the Church; and this is but one example of the manner in which, during the struggle of centuries, the Church maintained her rights.

But in the Church herself there was a decline from the early rule of canonical election. The people were gradually excluded; then part of the clergy, till at last the Fourth Council of Lateran restricted the election of bishops to the canons of the cathedral. Then came the captivity at Avignon; the age of pontifical reserves; of pragmatic sanctions; and of concordats—by which the Church made terms for her authority over her own subjects. In fine, the elections were taken from the clergy and the people—taken out of the hands of the canons of the cathedrals—taken from under the control of the pontifical reserves; the long established rights of the Church were abolished, and the elections in all Catholic nations were abandoned to the lay power, reserving to the Pope the empty rite of confirmation.

The history of the Middle Ages is full of the struggles of the

Popes against lay investiture, and nominally for the right of canonical election; but they are no longer the struggles of the early Fathers for the purity of the Church of Christ. The leader in the war was Hildebrand, and his mantle seemed to have fallen on the Popes who succeeded him. Rome won the battle, and history has recorded *how*; but the authority which she had acquired by the terror of her interdicts languished into pontifical reserves, was counteracted by pragmatic sanctions, and at length compromised by concordats, till at last, in the sixteenth century, the cause gained by Hildebrand and his successors was again lost by the Church. The three great parties in the war against the Popes were Henry VIII. of England, Francis I., and Charles V.; in England Rome lost all, and happily for the cause of truth; in France and the Empire the nomination to benefices was ceded to the sovereign, the Pope reserving a mere subordinate authority in the right of confirmation. Such have been the rule and practice since; the bishop owes his ring and staff to the prince rather than to the Pontiff.

That the right of election belongs to the clergy and to the Christian people, Rosmini lays down as the scriptural rule, and as the law of the primitive Church. The civil power can require no more of the pastor than that he should be a good subject, obedient in all that relates to the laws of the State, but has no right to require that a pastor of the Church of Christ should be "*un misero impiegato di polizia*." But the fidelity of the pastor to the prince does not consist in flattery of his sovereign, or the sale of his own conscience, but in holding up to all the truth of the gospel, and the law of God's word. The appointment of the bishops now are political appointments, regulated by political interests, and dependent on the character and sentiments of a cabinet or a court; and, in such a case, where is the Church's liberty, or that right of counsel and election which was awarded to the faithful by the disciples of the Lord?

Nations are jealous of an *imperium in imperio*; and certainly the Church of Rome does not afford a very favourable arena on which to fight the battle of spiritual independence. In England we are not a little proud of our old statutes of mortmain, provisors, and *præmunire*; and, whatever may be said for the Lanfrancs and Anselms, St. Thomas à Becket is not exactly a saint according to the Protestant calendar. The Synod of Thurles has not quite convinced our Legislature of the great spiritual advantages to be derived from synodical action; and we have not yet been able to appreciate the wisdom and the tender concern of Mother Church for the educational and intellectual advancement of her children, by enrolling on her excellent Index the Greek Lexicon of Scapula and Whately's Logic.

We have made no little stir against the "government" of a cardinal, though taking title from that sacred spot in "Rome the Holy" where "St. Peter is groundedly believed to have enjoyed the hospitality of the noble and partly British family of the Senator Pudens." We judge the Church of Rome as a great ecclesiastical despotism, grasping at civil supremacy; and the history of that Church, from the time of the Seventh Gregory down to the "Letters Apostolic" of Pius IX., reconstituting the Romish hierarchy, with sounding titles, in the "very flourishing realm of England," verify the judgment. But Rosmini's plea on behalf of his Church, for liberty of action, must be judged of, not separately, but along with the other principles which he has laid down. *His* Church would not mumble a Latin mass; would not withhold the Book of books; would not separate the people in understanding and in heart from those who are set over them in holy things; and would have no division of the clergy into high and low, lords and subjects. His Church would not grasp at *benefices*, for the very name he abhors, as the memorial of liberty bartered by the Church for wealth; her rule, her interests, her work, belong not to an earthly kingdom.

Rosmini's ideal is the early Church, unsold to any earthly power, but usurping no temporal dominion. With all the zeal of a Guelph he contends for the Church's independence, and stands forth as the apologist alike of Hildebrand and Loyola. But the Church of Rome never has answered his ideal, and were that Church reformed even according to the principles sketched in his Essay, imperfect as that programme of reform may be, she would no longer make merchandise of souls, nor sit as a queen on the seven hills. Let the Roman bishop resign his triple crown, and return to the simple condition of the pastors of the flock before Constantine had bestowed the "fatal gift" on the "first rich father"—let the distinction between higher and inferior clergy be annulled—let the Book of books circulate freely, and the word be preached, so that every man may "hear in his own tongue the wondrous works of God"—and let the people have that voice and vote in the election of their pastors which the apostles and the early Church recognised; and when this reform has been effected, we shall not have much difficulty in coming to an agreement on the subject of synodical action. We do not need at this time of day to discuss over again for the ten-thousandth time the question of lay patronage in a Church that claims no authority over the things that are Cæsar's: but it is curious to mark how parties the most opposite in their tendencies meet at one narrow point on this subject of spiritual independence, only to diverge from it again. Rosmini has made

as near an approach to true principles on this question as any Romanist can make, but in doing so he has levelled the whole constitution of his Church, and fallen under the heavy censure of its authorities. The marvel is that one who has discovered such grievous declensions in the course of ages from the truths taught, and the principles carried out into practice by the apostles of the Lord, should continue to acknowledge the Church of Rome as the Church of Christ. The high-priests of the Italian Republic caught up the principle of the independence of the Church, not so much in concern for the authority of the Pope, as in zeal for the liberties of the people; the Venturas maintained it in eloquent declamations before the *élite* of democracy, and the Gavazzis rung it into the ears of the groundlings. The Pontiff and his Jesuit allies, abhorring in their heart of hearts all liberty of conscience among the people, sung *Te Deum* when the *Placet* was abolished in Austria, as the young Emperor had thus made the first step towards the giving over his dominions to a great spiritual despotism, the tried and trusty friend of unmitigated absolutism in the State. The Guelph in these days joins hands with the Ghibelline, as the new enemy that has arisen is an enemy to both. The Pope and his council plead for the independence of the Church that they may bring the bishops more thoroughly into subjection, and through the bishops enslave the people. Mazzini demands a council that he may crush the Pope. The new hierarchy in England makes an appeal in favour of synodical action; and the old hierarchy which feels itself assailed pleads for the revival of the Convocation, that it may not only assert its own authority in doctrine, but settle the weighty matters of candles and surplices. The pretensions of the Church of Rome grasping at her old supremacy over the bodies and the souls of men, and the pretensions of a Romanizing clergy assuming in a Protestant land all the airs of a priesthood, make us thankful at the moment for even such a weapon as the royal supremacy, to repel the aggression from without and from within. But the only antagonist that shall in the end prevail against error is the truth; and whether for meeting the assailants of our faith, or for the preserving of the doctrine and discipline of the Church, we should trust more to those really scriptural principles to which Rosmini has made so near an approach, than to the control of a parliament over benefices and bishops. Let the English Convocation be revived, and it is not too much to say that evangelical truth might run some risk at present; but let in at the same time the element of the popular voice in the election of pastors, and the sound Protestantism of the English people would make short work of "mummeries." And when Pius IX. claims unlimited authority

as successor of St. Peter, let him be required to answer whether he "enjoys a good reputation among the faithful," in his own See of Rome, and his guard of Gallic bayonets would make an affirmative answer no little awkward. Above all, let the Canons of the early Church as to the election of pastors be carried out in Tuscany, and we suspect the result would be such as Rosmini has not dreamed of. Tuscany, notwithstanding the walls of defence raised by the wisdom of Peter Leopold, has had her "Papal Aggression." The Church has formed an alliance with despotism, and continental liberalism under whatever form must wage warfare against both. Rosmini sees no hope for the Church save in revolution—not that he can sanction rebellion, or preach it as part of his creed, but that Providence may use the arm of the rebel to punish unjust usurpation, and to vindicate the liberties of the Church. Whatever the right and wrong of the question may be, the fact is evident, that in Roman Catholic Europe the elements of revolution are ready to break out again, and the time cannot be far distant when the continental kingdoms shall once more heave to the earthquake.

V. The last of the evils which Rosmini deplotes—or, as he terms it, the "Wound of the Left Foot"—is *the servitude of ecclesiastical property*.

The system of the Church at present is an organized feudalism—a system of lordship and of vassalage. The clergy are divided from the people as an ecclesiastical caste; the clergy themselves are divided into lords and subjects; the higher clergy, or bishops, are divided from each other by vassalage to their respective princes; the Church in each kingdom is subject to the civil government in the election of its pastors; and, finally, the administration and use of ecclesiastical property are subject to the control of the secular power. The feudal spirit still regulates the relations of the Church.

The first rule of donations to the Church is, that they should be freely, spontaneously given. The Levitical law of tithes was not continued under the New Testament, that the measure of giving might be regulated, not by positive law, but by the consciences of the faithful. But when the Church degenerated, the free offerings of temporal things by the members of the Church to those who ministered unto them spiritual things, were merged and lost in the relation of debtor and creditor; and the donations of the faithful were absorbed in feudal property. Hence the laws of mortmain, regulating the property held by the Church in "dead hands," and hence the frequent examples of sequestrating all ecclesiastical goods for the uses of the State. The Church waged war with canons, Pontifical bulls, and excommu-

nications, to defend her secular wealth, but in a spirit unworthy of her character and her calling. In the early ages of Christianity, the words "secular clergy" had not been invented as a term descriptive of the pastors of the flock. Rosmini lays down rules for the regulation of ecclesiastical property, and deplors the scandal and the evil which arise from the prevalent idea that the Church has her hands always open to receive, but never open to give, and that all that enters her ark goes no more out. This unseemly grasping at this world's goods, excites the governments to interfere in sequestrating ecclesiastical property, and stirs up the people to break open the locked doors of the sanctuary. The Church, he says, should make public all her accounts, and publish an annual balance-sheet of all her income and expenditure; and if disputes arise between the ecclesiastical order and the secular power, the Church should rather abandon all her temporal wealth than run the risk of losing her hold on the hearts and consciences of the people.

It is difficult to persuade the Romish clergy that it is for their good that they should be unburthened of their temporal wealth; and in Italy, especially, it has passed into a proverb, *Wo be to the man who has money-dealings with a priest!* And the clutching ecclesiastics soften their avarice into a virtue, for they say the property is not theirs, but belongs to the Church, and they must defend the goods of the Church from the comfortable patrimony of St. Peter downward to the smallest benefice. The bishops, in addition to the somewhat notorious "*pro posse persequar*," swear to defend against all deadly the *regalia sancti Petri*. That they should exemplify Rosmini's virtue of willingly giving up their worldly goods for the peace of the Church and the good of souls is out of the question, and it is not a little difficult for Roman Catholic countries to apply the overgrown wealth of the clergy to the purposes of the State. When France laid her hands on ecclesiastical property in 1789, she was not particularly anxious about her reputation for Catholicity, and the reforms of the first Leopold in Tuscany were not certainly endorsed by the Pope. Even liberal and constitutional Sardinia, after such a bold measure as the passing of the Siccardi laws, is not prepared to go the length of sequestrating the property of the Church and pensioning the clergy. It is an interference with the canon law, and the Church will not suffer the *concordia discordantium canonum* of Gratian to be disturbed. It is an interference with the will and intention of testators, who have bequeathed their property to the clergy that masses may be said for the repose of their souls; it is a violation of solemn concordats with the court of Rome, and sacrilege in the eyes of the Church. When a nation abjures the doctrines of Romanism the case is clear; the

faith of posterity cannot be held in mortmain, and that which has been wrested by fraud and deception, and applied to idolatrous or superstitious purposes, may be restored again to legitimate uses. But the case of Sardinia shews how hard it is for a liberalized kingdom to act out its liberalism and yet retain its Popery. Rome never willingly yields one inch of ground that she has gained in the long struggle of thirteen centuries, and if kingdoms wait for the consent of Rome to their plans of reform, all progress is impossible. The brilliant aberrations of 1847 did not continue long to astound the world, and Popery has sobered into itself again. Such tricks may not be played again in St. Peter's Chair.

We have thus sketched the programme of reform proposed by an Italian priest, attached to his order, and willing to maintain all its influence; but it must be evident that reformation, even up to the point proposed, would destroy the characteristic features of modern Popery. Under Gregory XVI. the *Cinque Piaghe* lay unpublished in the author's desk—under Pius IX. the treatise has been put in the Index, and the writer exposed to the continual attacks of the priesthood. The Romish system requires something more than even Rosmini has proposed, and reformation originating in the Church itself may at once be given up as hopeless. The sober philosopher has managed to maintain his place, but his followers have been scattered or silenced. Father Ventura has read his recantation, and sunk into obscurity; and Father Gavazzi, if we may name him in such company, has been "starring it" in London, where his weekly orations have been "done" for the English press by an abler hand than his. Gioberti, too, has run his course, and retired into that privacy which, for his own credit, he should have never quitted. The vision of a reforming Vatican has been dissipated—Italy lies prostrate as before—and the dreaded company of Loyola have climbed again into the high places of the Eternal City. It will no longer do to assail abuses and bow to the holder of St. Peter's keys. The Neo-Catholic spirit is all but extinct in Italy: its noblest impersonations were Manzoni and Silvio Pellico; but the beautiful creations of the novelist are a libel on living capuchins and living cardinals, and the prisoner of Spielberg has outlived his reputation. Where, then, are we to look for the hope of reformation? Shall we find it in Mazzini and his republic?

If nothing more were sought than an overturn of the *statu quo*, we might answer, Yes; and certainly it would be difficult to reduce Italy to a worse condition than her present; yet we have not much confidence in Mazzini's substitute for the Papacy and the princes. Still it is evident that, without an utter over-

turn of the present system, there is no hope for the Peninsula. In the last revolution the democratic party was in the minority. Till the Allocution of April, Italy had not lost faith in the Pope, and the first campaign closed before she had lost faith in the princes. Novara dispelled all her dreams of independence, and the reaction quenched every hope of reform. Sardinia alone rose above the waters. The prisons of the two Sicilies are gorged with victims beyond number; in Rome the flag of the keys and mitre is guarded by the bayonets of France; and the same Pontiff who signed the amnesty of 1846 holds twelve thousand prisoners immured for political offences. The Romans "bide their time;" for one day in Paris may change all the relations of fickle France. In the gentle Tuscany, a miserable Government is fast undoing all that her legislators and reformers had done to raise her above the level of Italian states, and edicts worthy of the darkest days of barbarism have been placarded on the walls of Florence. Lombardy and Venice are still in the iron grasp of Austria, and Parma and Modena retain their little despots by favour of their Imperial "Protector." "The war of kings" ended at Novara, and Mazzini has since risen into a veritable power in Italy. When another revolution breaks out—and break out it must ere long, for all the elements are working beneath the surface with tenfold greater power than before—there will be fewer questions about kings and constitutions; and the wretched Governments of the Peninsula have forfeited all claim to liberal sympathy for the "weird" they have to "dree." But it is chiefly with the possible ecclesiastical changes we have to do, should the Mazzinian policy prevail in Italy.

And, *first*, after the decree of the *Senatus Populusque Romanus* on the 9th of February 1849, it is needless to say in what way the Republican party would deal with the temporal power of the Pope. At that time, when it was declared by the representatives of the Roman people that the Pope had fallen from his temporal power *de facto et de jure*, it was also decreed that the Roman Pontiff should have all necessary securities for his independence in the exercise of his spiritual power. We are not sure that the "Roman Pontiff" would escape so easily again. The defenders of the Papacy have been labouring hard of late to prove that the liberty of the Church requires that the Head of the Church should be independent—that this independence implies and requires a temporal dominion—and that such temporal dominion must be free from the control of a representative constitution, which, in fact, does not suit a Pope. The clique of old ladies that edit the *Civiltà Cattolica*—by far the ablest organ of the Papacy in Italy—have not yet convinced the world

that Rome enjoys more real liberty than any state in Europe, and that even the Model Republic is not so happy nor so free. Whatever the influence of the Pope may be in other quarters, his own subjects are strangely insensible to their blessings, and have listened to the voice of the demagogues. Democracy has been gaining power in the Peninsula since the first organization of the Neapolitan Carbonari. Father Curci, indeed, traces the origin of the system higher. It began with Lucifer ; it whispered in Eden, "Ye shall be as gods ;" it possessed itself of the heart of Cain, and began its earthly course in fratricide ; it rose up again in Nimrod, and made him "a hunter of men ;" and it inspired the builders of Babel to resist nature and her God. In the time of the Messiah it called itself Judas, and Caiaphas, and Pilate ; centuries afterwards it was Mohammed ; and when nearly another millennium had elapsed, it was Luther. Now it is Ronge in Germany—Proudhon in France—Mazzini in Italy. Here, then, is the *catena patrum* in favour of democracy. Whether the Papacy is yet to be swept away by the tide of infidel democracy remains to be seen ; but certain it is that the revolutionary flood is flowing fast towards the "seat of the beast." Italy has not yet sunk to the level of France, has not yet become infidel ; but the Papacy, unable to uphold its superstitions, and yet determined to shut out the truth, is fast obliterating every sentiment even of a false religion, and preparing the weapons for her own destruction. The republican faith in the future is in the constituent and the council—the "mission" of the Pope ended in 1848.

The democratic party would introduce a sweeping reform into the whole Church Establishment, which even Sardinia has not yet dared to attempt. Italy is literally eaten up by her army of ecclesiastics. In Sardinia, with a population of less than 4,500,000, there are 4 archbishops, 26 bishops, 52 vicars, 1484 canons and chaplains, 3854 parish priests, 7300 regulars of both sexes, and 3000 ecclesiastics, secular or regular. In the island of Sardinia, with a population of about half a million, there are about 3000 ecclesiastics, secular or regular : the convents throughout the kingdom amount to 428. In the Grand-Duchy of Tuscany, with a population of 1,500,000, (excluding Lucca,) there are 8757 secular clergy, 2540 regular, and 3900 nuns : the convents are 210. The number of convents before the time of the Leopoldine reforms was 300, and their patrimony, according to Count Serristori, (*Statistica dell' Italia* : Firenze, 1842,) "was represented by a capital of 98,000,000 of Tuscan livres. In the kingdom of Naples, with a population of 6,000,000, there are 26,304 priests or secular clergy, 11,394 regular clergy or friars, and 9512 nuns. In Sicily there are about 1316 con-

vents with a population of 15,182 monks or nuns, and this is an island numbering but 2,000,000 of inhabitants! In the city of Rome, with a population of about 150,000, there are nearly 2000 secular clergy, with about 4000 monks and nuns—in all 6000, or one to every twenty-five of the population. We could willingly enlarge on this subject, but these few facts may suffice to give an idea of the priestly element of Italian society. To account for the excessive numbers of the clergy, we must bring the doctrine of purgatory into the question. A priest can celebrate but one mass each day; and all the clergy in Italy are scarcely sufficient to say all the masses that must be said for the souls of the dead, and for the ordinary services of the Romish Church. The purgatorial domain is fruitful beyond all others in the production of priests, or of income for priests. The convents, again, are nurseries of idleness or vice; the lands of the wealthier orders lie uncultivated, while the monks fatten into a living scandal on the poverty of their profession. But the palmy days of Italian monachism are past, and of late the higher orders of monks have draughted but few novices into their convents. It would be exceedingly interesting to examine the condition of the monasteries throughout Italy, and to judge how far the spirit of the age has penetrated into the cloister. We believe that, among higher religious orders, the statistics of the convents would lead to the conclusion that monkery is dying for want of monks. The whole establishment of Vallombrosa, with a refectory fitted for 200 brothers, has been reduced to about four-and-twenty, including priests, lay brothers, and novices. Among the “Dons” of the magnificent Camaldoli, there are so few novices that the most beautiful of the sanctuaries of the Apennines may soon be empty of the followers of St. Romuald. We could point to one of the finest of the Olivetan convents where there is not a single novice, and where six recluses are wearing out their days in the all but deserted cloisters. To the sickly admirer of mediæval devotion, Italy seems a body from which the soul is departing. *Proh pudor!* the French are in Rome! In central and northern Italy the convents have been turned into barracks, or divided between monks and Croats. In the fair Florence the cloisters of St. Mark echo to the tramp of the soldiers of Austria: they have locked Savonarola’s cell, and boarded up the frescoes of Fra Angelico. The Dominicans, or, as mediæval legends loved to call them, the *Domini canes*, the dogs of the Lord, have somewhat overdone the thing, in establishing a reputation for the eager hunting out of heretics; and as the inquisition and the censorship do not happen to be popular just now, it is time that they should set their house in order. During the last revolution

the Jesuits were chased from every kingdom of Italy when the popular voice prevailed, and that formidable order must stand or fall with absolutism. While the Romish Church is decaying, and becoming gradually more feeble in the other orders, all her vital energies have been concentrated in the Society of Jesus. They have taken the traditionary place of St. Francis and St. Dominic, and uphold the falling Church of St. John Lateran. Rome is mustering her hosts for her last effort to regain her lordship over the bodies and the souls of men, and the Jesuits are the men whom she has chosen to order the battle. In the bosom of Catholicity itself, a spirit of resistance has been roused; and the Church, true to her principle, has leagued her priesthood with despotism, and blessed the princes in breaking the oaths by which they bound themselves to bestow a measure of freedom which proved dangerous to sacerdotal pretensions. The democracy of Gioberti, and the popular election of Rosmini, whatever their effect might be in the extremities, would make wild work for the Church in the central seat of Romanism. The "mission" of the Jesuits has not yet been accomplished. There are other orders that keep their place and flourish by the sheer force of ignorance. The corded Franciscan and bearded Capuchin are men of the people, and their convents are still abundantly crowded with the spiritual progeny of the beggar of Assisi. The vocation of the ecclesiastical *gaberlunzie* might harmonize even with the Mazzinian motto of—"God and the people."

The wanderings of twenty years, the war of the *Costituente*, and the brief term of the dictatorship at Rome—no longer Rome of the Popes, but Rome of the people—have thrown the charms of romance around the exiled Genoese; and the present condition of Italy, trodden down by the iron heel of both secular and ecclesiastical despotism, makes one almost long for the return of Mazzini. His principles imply at least liberty of thought and of action; and a free Gospel might work a wondrous change in a land that has not yet cast off all sense of responsibility to God. But all the iniquities of Rome may not tempt us into even a momentary approval of theories that differ *toto cælo* from the "Evangel" of Christ. The "Paroles d'un Croyant" of the Abbé Lamennais are but a poor travestie of the faith, and we must class Mazzini with such "believers." We might refer to the volumes published many years ago in exile, to the selections printed in Florence in 1848, and to the little pamphlets which still issue from secret presses, and make their way to thousands of eager readers throughout the length and breadth of the Peninsula. Some of these have been presented in English garb to British readers, so that we need not spend time in expounding

his theories. The Gospel he receives as a code of liberty, fraternity, equality, in the political and democratic sense of the words; and, instead of the falling or fallen Papacy, the people are to him the expounders of the will of God—his millennium is democracy. We listen not to one word of his maligners—his personal integrity has been proof against slander; and it can be no pleasure to dwell on writings so beautiful in language and rich in poetic sentiment, and expressing at times such lofty thoughts on the destiny of man, and yet to find nothing but poetic paganism breathed into the outward forms of Christianity. Even the downfall of the Pope, and the overthrow of his hierarchy might leave all untouched “the soul-destroying heresies,” as our forefathers called them, that have wrought themselves into the very sentiment and common thought of Italy. The creed of Rome has been infused into her architecture, her sculpture, her painting, her poetry, her romance, and what unsparing iconoclasm shall break all her idols? The one remedy that would heal “the wounds” of a corrupted “Church” may not be applied; for both the Church and the States which she inspires have combined utterly to reject it, and a constitution so diseased is beyond the power of the *vis medicatrix*. It is impossible to reform and be infallible, and in the vista that is opening we do not hope to discern the Vatican of Gioberti. The heavens are ominous enough of change, and the bright day will doubtless come at last; but, like the cloud blackening over Vesuvius, there are symptoms of impending woes when the contending elements shall break out, and the great city shall be divided, and the cities of the nations shall fall, and great Babylon shall come in remembrance before God.

ART. IX.—*The Exposition of 1851; or, Views of the Industry, the Science, and the Government of England.* By CHARLES BABBAGE, Esq., Corresponding Member of the Academy of Moral Sciences of the Institute of France. London, 1851. Second Edition.

THE Exposition of 1851—the great experiment of modern times, at first an idea, at last a reality—now stands before us, gigantic and sublime, commanding the admiration, and challenging the criticism of the civilized world. Commingling its crystal canopy with the azure vault which surrounds it, and stretching its magic corridors beyond our visual range, we are at once startled by its colossal magnitude, and enchanted with its fairy trellis work. In its moral and political, more than in its physical aspect, it is instinct with deep instruction, and pregnant with matchless results. Within the precincts of the lofty bazaar are displayed the productions of a planet—its diamonds and its gems; its gold and its metals; its coal and its minerals; the ancient and the recent productions of its soil; and the rich spoils of its animal and vegetable life;—the elementary materials, in short, of the terrestrial freehold which the Great Benefactor has made over to man. Around them stand in proud array the noblest efforts of human genius; the lifeless portraiture of forms divine; the brilliant fabrics; and the wondrous mechanisms which science and art have combined their powers to create. The sage and the artist of every clime, of every colour, and of every faith, are here enabled to study the productions of each other's country, to ponder over each other's labours, to share each other's wisdom, and to learn those lessons of love and charity, which a community of race, of interest, and of destiny, cannot fail to teach. Thus has the Palace of the Arts become a cosmopolitan gymnasium for the instruction of the world, and a temple of concord, in which a thousand hearts may beat as one, and a thousand anthems issue from every tongue. Nor will this knowledge be fruitless, and this community of feeling cease, when the Palace itself has been dissolved, and its riches scattered, and its occupants dispersed. If in the material world the most repulsive elements may be permanently compressed within their sphere of mutual attraction;—if in the world of instinct natures the most ferocious may be softened, and even tamed, when driven into a common retreat by their deadliest foe,—may we not expect, in the world of reason and of faith, that men, severed by national and personal enmities, who have been

toiling under the same impulse, and acting for the same end, who are standing in the porch of the same hall of judgment, and panting for the same eternal home—may we not expect that such men, thus temporarily united in heart and in purpose, will never again consent to brandish the deadly cutlass, or throw the hostile spear? With such feelings, we doubt not, has the Exhibition of the Industry of all Nations been viewed by every party who has visited it; by the sanguine, who never doubted of its success; by the more cautious, who feared it might be impracticable; and, we hope, also even by its enemies, who not only anticipated, but desired its failure.

The history of so remarkable an event as the “Exposition of 1851,” in its origin, its objects, and its probable consequences, cannot fail to be a subject of the deepest interest, not only to those who have been its most frequent visitors, but to those who have never seen its exterior, or entered its walls. We shall endeavour, as briefly as we can, and yet as fully as our limits will permit us, to gratify the wishes of these two classes of our readers.

As early as the year 1845, after his Royal Highness Prince Albert became President of the Society for the Encouragement of Arts and Manufactures, he suggested the formation of a great periodical exhibition of the produce of British industry, in arts, manufactures, and commerce. A committee of the Society was appointed, on the 16th June 1845, to carry this suggestion into effect, and considerable sums were liberally subscribed to defray the necessary expenses; but the indifference of the public, the lukewarmness of manufacturers, and the hostility of some of the most eminent of their number, induced the committee to abandon the attempt.

There are some men, however, whom Providence occasionally summons to its aid, as the pioneers and the promoters of great undertakings—men of moral courage, whom no self-interest seduces, and no failure daunts, and no opposition subdues—who, looking beyond the influences of the passing hour, and viewing measures in the maturity of their results, determine at once to realize them. The Committee of the Society of Arts contained men of this high organization. Mr. Scott Russell, in December 1845, placed £50 at the disposal of the council of the Society of Arts, to be offered in “prizes for a series of models and designs of useful objects, calculated to improve general taste;” and it was further proposed, “that they should collect and exhibit models of the most exquisite works in art, for the improvement of the taste of workers and manufacturers in metals.” To this sum Mr. F. Cooke added £50, and the Society of Arts the same sum. A competition for these prizes

took place in May 1846; but few competitors appeared, and the judges had some difficulty in finding subjects deserving of reward.

The first exhibition of select specimens of British manufacture took place in March 1847, but it would have been a complete failure, had not two individuals, by personal exertion, obtained from a few great manufacturers a sufficient number of articles for show. The exhibition, however, was successful. Twenty thousand persons visited it, and the manufacturers, who had hitherto stood aloof, were now convinced that the articles had been favourably seen and rightly appreciated. In 1848, the exhibitors came forward unsolicited, and the Exhibition was witnessed by upwards of seventy thousand visitors. The third exhibition, in March 1849, was still more successful. Prince Albert offered a prize for the encouragement of colonial manufactures, and another for the improvement of an important art. Her Majesty, and several of the nobility and gentry, contributed objects of art to the exhibition, and a larger number than usual of medals and prizes was conferred by the Prince on the more eminent manufacturers. The success of these preliminary arrangements encouraged the Prince and his coadjutors to advance with a still bolder step. The Board of Trade had agreed to co-operate in the scheme of a great triennial exhibition, and the First Commissioner of Woods and Forests had consented to give a site for a suitable building. It was accordingly announced to the public in March 1849, that a series of periodical exhibitions of British industry, and an appropriate building, would be immediately commenced.

The great idea of Prince Albert, of an Exhibition of the Industry of all Nations, was now about to be realized. The ignorance and apathy of manufacturers, the indifference of the public, and the lukewarm acquiescence of Government, had given way before the zeal and energy of its promoters. In June 1849, Mr. Scott Russell first ventured to submit to the Prince his opinion, and afterwards to state publicly at the annual distribution of prizes, that the time seemed to have arrived for carrying out the original suggestion of His Royal Highness. Mr. Russell had an audience of Prince Albert, and a small committee, consisting of himself, Mr. Cole, Mr. Fuller, and Mr. Cubitt, assembled at Buckingham Palace on the 30th June 1849, when the Prince communicated his views regarding the promotion of a great collection of works of industry and art in London in 1851, for the purposes of exhibition and competition; and it was on this occasion that His Royal Highness mentioned the four great divisions of *Raw Material, Machinery and Mechanical Inventions, Manufactures, Sculpture and Plastic Art*, of which the Exhibition should

consist. It was at this meeting, also, that the great feature of universality was given to the Exhibition by Prince Albert, and that it was agreed that it should comprehend the *Industry of all Nations*. Thus involving questions of international relations and colonial interests, and requiring the use of royal property for a site, it became necessary that the affairs of the Exhibition should be conducted under a Royal Commission. Six months elapsed before the Government came to a decision on the subject. In the meantime, the Committee and the Society of Arts continued actively to complete their arrangements; and when the Ministry saw the firmness and resolution with which the Prince and his friends prosecuted their enterprise, they issued their Royal Commission on the 3d January 1850. After naming the Commissioners, the Executive Committee, and their Secretaries, the execution of the plan was entrusted to any three or more of the Commissioners.*

Such was the sanction tardily given by the Government to this great undertaking. It involved them in no responsibility, bound them to no outlay of public money, and did not even imply the granting of a site on the property of the Crown. This ungenerous concurrence, however, did not daunt the ardour of the Prince and the Commissioners. They proceeded with great zeal to collect the necessary funds, and complete the necessary arrangements. Travelling Commissioners had been dispatched to the provinces to organize local committees, and Mr. Scott Russell had visited Prussia, and secured the co-operation of the authorities at Berlin, and of the States of the Zollverein in promoting the objects of the Exposition.

A site in Hyde Park having been fixed upon by the Commissioners, and granted by the Government, they advertised for a temporary and fire-proof building, which could be quickly erected, and still more quickly removed. No fewer than 245 designs† were speedily prepared, and exhibited by the Society of Arts; but though a few of these were selected as deserving of praise, yet the greater number were found to be of no value, from their inconsistency with the conditions laid down by the Commission. Beautiful and ingenious as some of the selected plans were, they were nevertheless all rejected as unfit for the purpose to which they were to be applied.

* The only important fact stated in the Commission, is that £20,000 was invested in the names of certain Commissioners, to be awarded in prizes and medals to the exhibitors of the most meritorious works.

† Of these plans 38 were by foreigners; France sending 27, and other European states 11. Residents in London sent 128; residents in provincial towns in England and Scotland sent 60; and 7 were anonymous.

In this dilemma an event occurred so remarkable in itself and so singular in its results as to deserve being remembered. Mr. Paxton, who had superintended the construction of the Duke of Devonshire's hothouses, &c., at Chatsworth, was presiding at a Committee of the Midland Railway, assembled at Derby, to inquire into the conduct of a pointsman who had committed a railway offence: There lay before him a clean sheet of blotting-paper, upon which he was observed to be writing while the trial of the pointsman was going on: he was then asked to give his opinion on the case, as he had been paying particular attention to it. Having been previously acquainted with the particulars of the case, he had employed his time in making a sketch of the Crystal Palace, which, in the course of ten days, was expanded into regular plans, sections, and elevations of this remarkable design. The original sketch, thus so singularly executed, is displayed in the Exhibition, and is universally regarded as a document of peculiar interest. It represented a building consisting chiefly of glass and iron; and having been adopted by the Royal Commission, Messrs. Fox, Henderson, and Co., gave in a tender to construct it for £79,800. The Crystal Palace consists of a transept and a nave. The transept is 408 feet long from south to north: it is surmounted by a semi-cylindrical vault, 72 feet in diameter, springing from the vertical pillars at a height of 68 feet from the ground. The nave, including the width of the transept, is 1848 feet, the total length of the building. It is 64 feet high and 72 wide, and on each side of it extend aisles 24 feet in width, and above them at a height of 24 feet from the ground are carried galleries, which surround the whole of the nave and the transept. Beyond these first aisles, and parallel with them, at the distance of 48 feet, there are other aisles of the same width similarly covered with galleries of the same height as those over the first aisles. Bridges at frequent intervals span the 48 feet avenues, and divide them into courts. The 48 feet avenues, and the second aisles, are roofed over at the height of 44 feet from the ground. The rest of the building consists of one story 24 feet high without galleries. Access is given to the galleries by ten double staircases 8 feet wide. The total area of the ground floor is 772,784 square feet; and that of the galleries, which extend nearly a mile in length, 217,100 square feet. The cubic content of the whole building is 33,000,000 feet. There are 896,000 superficial feet of glass, weighing 400 tons,—2300 cast-iron girders,—358 wrought-iron trusses for supporting the galleries and roof,—30 miles of gutters for carrying water into the columns, and 200 miles of sash bars. Of wrought-iron, 550 tons have been used, and of cast-iron 3500 tons. The quantity of wood, including the flooring, is about 600,000 cubic feet.

The breadth of the nave is nearly double that of St. Paul's, and its length more than four times as great.

Such is a general description of the Crystal Palace, in so far as words and numbers can describe its form and dimensions; but no language, even with the aid of the most correct drawings, can convey a just idea either of its exterior magnificence or of its internal splendour. We may indeed delineate in imagination its lofty transept raising its glassy roof to the skies, and its lengthened nave vanishing from the eye in its distant and misty perspective:—We may gaze along its endless avenues, and rest our wearied eye-ball among its numerous aisles, but we strive in vain to create the gigantic portrait of the whole, or to construct mentally its gossamer of iron, or summon before us the innumerable and ever changing pictures which from above and from below meet the eye while we wander in astonishment through its crystal labyrinths.

Still more difficult is it to form even an approximate idea of the number, variety, and magnitude of its contents,—of the splendour of its furniture, or the richness of its decorations. On the external outline of its walls, and from its iron balconies within, wave the banners of nations—those bloody symbols of war under which our ancestors, and even our friends, have fought and bled. They are now the symbols of peace. Woven and reared by the hands of industry, they hang in unruffled unity—untorn by violence, and unstained with blood—the emblems indeed of strife, but of that noble strife in which nations shall contend for victory in the fields of science, in the schemes of philanthropy, and in the arts of life. The trophies of such conquests, the triumphs of such arts, are displayed within. Who can describe them without “thoughts that breathe and words that burn?” *Here* are the materials gathered from the surface, or torn from the bowels of our planet, the products of primæval creation or of annual growth, the direct gift of God to man—the elements of civilisation, from which his genius is to elaborate those combinations of science and of art which administer to the comforts of life and the grandeur of nations. *There* are the instruments to grasp with the eye the infinite and the infinitesimal, to measure space and time, to charm, to cure, and to kill. *There* are the mechanisms which have made man a tyrant over matter, cutting and twisting, and tearing and moulding its most adamant as well as its tenderest elements—which break and pulverize the crust of the earth—which lift up its heaviest and most solid strata—which span its rivers and its valleys—which transport the riches of our commerce across the deep, and which hurry us on wings of iron, beating the eagle in its flight, and mimicking the lightning in its speed. Yonder are

the fabrics which clothe the peasant and the prince, which deck the cottage and glitter in the palace—the cup which the husbandman dips into the crystal well, and the goblet of gold and of silver from which the more favoured of our race quaff the nectar of the gods—the jewels which hang on the neck of beauty, or which play a part in the pomp of kings. And, finally, as if to chide the vanity of the riches that perish, and chasten the extravagance that lives but for the present, we see commingled with the baubles of wealth and luxury, with what the moth and the rust corrupt, those divine models which record in marble or in bronze, the deeds of heroism that time has spared—the glorious names which the past has preserved for the future—the forms divine of the sage who enlightened, the warrior who defended, and the patriot who saved his country.

From the things thus seen and appreciated, we would desire to describe the circumstances under which we have seen them, the numbers, the appearance, the character, and the conduct of those who have flocked to the Palace of Industry. The inauguration of the Exhibition on the 1st of May, when it was first opened to the holders of season tickets, was a scene of national interest which can never be forgotten by those who had the good fortune to witness it. In this imposing ceremonial the Queen and Prince Albert were to perform the principal part. The Prince, at the head of the Royal Commissioners, was to read a short report on the proceedings of the Commission, and the Queen was to return an answer. Under ordinary circumstances such a ceremonial would have been one of those brilliant shows in which a sovereign in all the pomp of state exhibits herself to her subjects, but on this occasion it had a very different character. The Prince had proposed the Exhibition which was about to be opened ;—the Queen had patronized it ;—the public had viewed the scheme with an unfavourable eye ;—the great and the wealthy took alarm, and became its enemies ;—the ignorant hesitated,—the timid quailed : Philosophers threw their science at the airy fabric, while the engineer directed against it the bolts of his practical wisdom. Even the manufacturer and the artist, whose interests it was especially calculated to promote, viewed it with suspicion ; and the Government itself, which, like other European Governments, ought long ere this to have established such an Exhibition for England, regarded it with coldness and indifference, and would have opposed it with all their influence had it been proposed by any other person than a Prince. In the face of all this opposition, the Prince proceeded with firmness and caution. He was sustained by the greatness of the object, and the grandeur of its results ; and by that union of sagacity and moral courage which never fails to achieve what it contemplates, he had

succeeded in rearing a Temple of Industry, and filling it with the rarest productions of the earth, and the richest creations of science and the arts.

The day of trial at length arrived. A jury of twenty-five thousand intelligent spectators occupied the interior, and traversed the corridors of the gigantic bazaar. They stood aghast before the splendour of its furniture, the brilliancy of its decorations, and the massive grandeur of its mechanism. They trod in safety its iron carpentry. The hurricane and the hailstorm spent their violence upon its glassy roof, and the Palace of the Arts took its place, in the vocabulary even of its enemies, as one of the world's wonders. But who can describe the moral triumphs of the inauguration day? A Queen holding her court in the midst of twenty-five thousand of her subjects, and listening to a Report by her husband connected with the arts and sciences of her kingdom, was a sight never before witnessed in England; and we shall never forget the moment when fifty thousand eyes were fixed upon their Queen when she rose to reply to the Report of the Prince. After traversing at the head of her court and the ambassadors of foreign nations, the nave and the transept of the Crystal Palace, her Majesty truly said, that that day had been the happiest in her life. Happy, too, we would add, is the country with a Sovereign that derives her happiness from the patronage of science and the arts; happier still would that country be were it governed by men who shared in the feelings of their Queen, and possessed the knowledge of the Prince.

Three months have now elapsed since the Palace of Industry was opened to the public. Upwards of 74,000 persons have visited it in one day: The poorest labourer and the humblest artisan have been among the visitors, and yet no vulgar word has been heard, and no vulgar deed perpetrated within its crystal walls. Lectures have been established for the instruction of those who desire to be acquainted with the different objects in the Exhibition. Intelligent guides have been provided to point out and explain to strangers the different objects in which they take the deepest interest, and in this great national gymnasium the most regular attendants, the most ardent students, and, we venture to say, the best scholars, are the Queen and Prince Albert. The young Princes, accompanied by their tutor, attend the same school; and while the restless tide of life is flowing in gentle murmurs over this truly Pacific Ocean, the Royal Barge may be seen riding undisturbed, while its princely occupants are surveying their intellectual domain, and anticipating in its auroral beams the sunrise of British science. We have ourselves visited the Exhibition almost hourly ever since it was opened, and in every hour we have seen new wonders, and imbibed fresh know-

ledge, and returned again to be taught and to be humbled. "It is," as we have elsewhere had occasion to say, "among the productions of minds, at once inventive and profound, that we discover the limits and recognise the littleness of our own."

Such is a brief notice of the Exhibition of the Industry of all Nations. We have conveyed no idea of it to our readers, because it baffles all description, and transcends even the power of imagination. The eye alone can grasp the marvellous phases of an edifice which presents from every part of its floor and its galleries new ranges of perspective, new groups of aisles, and new combinations of objects; and that mind alone which throws upon the productions around the glances of its reason can form a right judgment of the extent and grandeur of the scene. It is scarcely, therefore, a matter of wonder that men of ordinary capacity, and even men of a high reach of mind, should have failed in realizing to themselves the nature and consequences of such an exposition; and we are for this reason the more surprised that some individuals who had no share in its organization, and no personal interest in its success, should have hailed this great undertaking from its commencement, and given their best energies to secure its success. Mr. Babbage, the author of the work which we are about to analyze, was one of the first to perceive and to acknowledge the advantages of the Exposition,—to appreciate the value of Prince Albert's labours, and, though not one of the Royal Commissioners—a position to which the author of "The Economy of Manufactures," and the inventor of the Calculating Engine, was pre-eminently entitled—to exert himself both by his conversation and his writings, to promote the objects of so great an undertaking.

In treating of the Exposition of 1851, he treats also of the Industry, the Science, and the Government of England,—subjects which have now acquired the deepest interest from the hold which the two first have taken of the public mind, and the recognition which has been made of their value in the highest quarters. Without its science the industry of England could never flourish, and without the stimulus and patronage of an intelligent Government, the sciences and the arts, the very food of our industry, would sink into insignificance.

The influence of the Exposition of 1851 on the cause of domestic and foreign civilisation, and the peculiar difficulties which Prince Albert must have encountered in organizing it, are thus beautifully described in Mr. Babbage's Preface :—

"The merit of the original conception of the present Exposition is insignificant in comparison with that of the efforts by which it was carried out, and with the importance of its practical results.

"To have seen from afar its effects on the improvement, the wealth,

and the happiness of the people—to have seized the fit moment, when, by the right use of the influence of an exalted station, it was *possible* to overcome the deeply-rooted prejudices of the upper classes—to remove the still more formidable, because latent, impediments of party—generously to have undertaken great responsibility, and with indefatigable labour to have endeavoured to make the best out of the only materials at hand,—these are endowments of no ordinary kind.

“To move in any rank of society an exception to its general rules is a very difficult, and, if accompanied by the consciousness of the situation, a very painful position to a reflecting mind.

“Whatever may be the cause, whether exalted rank, unbounded wealth, surpassing beauty, or unrivalled wit,—the renown of daring deeds, the magic of a world-wide fame; to all within those narrow limits the dangers and the penalties are great. Each exists an isolated spirit; each unconsciously imprisoned within its crystal globe, perceives the colours of all external objects modified by those tints imparted to them by its own surrounding sphere.

“No change of view can teach it to rectify this partial judgment; throughout its earthward course the same undying rainbow attends to the last its parent drop.

“Rarely indeed can some deep-searching mind, after long comparison, perceive the real colours of those translucent shells which encompass kindred spirits; and thus at length enable him to achromatize the medium which surrounds his own. To one who has thus rectified the ‘colour-blindness’ of his intellectual vision, how deep the sympathy he feels for those still involved in that hopeless obscurity from which he has himself escaped. None can so justly appreciate that sense of loneliness, that solitude of mind, which surrounds unquestioned eminence on its lofty throne;—none, therefore, can make so large an allowance for its errors;—none so skilfully assist in guiding its hazardous career.

“The triumph of the industrial arts will advance the cause of civilisation more rapidly than its warmest advocates could have hoped, and contribute to the permanent prosperity and strength of the country far more than the most splendid victories of successful war. The influences thus engendered, the arts thus developed, will long continue to shed their beneficent effects over countries more extensive than those which the sceptre of England rules.”—*Preface*, pp. viii-xi.

No higher compliment can be paid to the exalted individual so delicately referred to in the preceding paragraphs, and no higher appreciation made of the results of his arduous and successful labours. If in the future part of his work Mr. Babbage criticises the proceedings of the Royal Commissioners, and suggests steps which they have not taken, they will doubtless ascribe his observations and his suggestions to that anxiety for the success of the Exposition which he so strongly feels.

Mr. Babbage’s work, which has already reached a second

edition, consists of seventeen chapters, in which, after some introductory observations on universal and general principles, he treats of the errors respecting the interchange of commodities—of societies and associations for advancing science—of the origin of the Exposition of 1851—of the object and use of the Exposition—of the limits to the size of the building, and the number and kind of its objects—of the site and construction of the building—of the prices of the articles exhibited—of prizes—of juries, and of the ulterior objects of the Exhibition. In discussing the topics referred to in these *twelve* chapters, Mr. Babbage is led into others not strictly belonging to the subject of the “Exposition of 1851,” but so closely connected with it that he would have done injustice to himself, and to the great cause of which he has been so long the eloquent pleader, if he had not done what no other person but himself was able to do—to expose without any false delicacy the intrigues of science,—to speak of the Calculating Engine, and the strange history of its fate,—to make foreigners, as well as his own countrymen, acquainted with the present position of science in England,—to speak of the influences of the press and of party on the advancement of knowledge, and to convey to readers of all classes what they know very little about, some correct information respecting the nature and number of the rewards which intellectual merit receives in the richest country in the world.

As the greater part of Mr. Babbage's work was in type before the opening of the Exhibition, but, from causes which he does not explain, not published till the building was erected, and the general arrangements of the Exhibition fixed, the Royal Commission was not able as a body to derive from his published remarks and suggestions all the benefit which they were so well calculated to yield; though we have reason to believe that he had communicated his views to individual Commissioners with whom he was personally acquainted. Regarding the plan of the Exhibition as “unrivalled for the advancement of the arts of peace, and calculated not only to benefit our own country, but to contribute to the civilisation of the world,” Mr. Babbage has commented with some severity on the conduct of the Ministry, and of the inhabitants of Belgrave Square and its neighbourhood, for the opposition which they made to it; and it was no doubt from the hostility which both these parties exhibited that all the fears and predictions of failure which so long and so deeply affected the public mind took their rise. Government had hitherto left all our institutions for the advancement of literature and science to be supported by voluntary associations, and it is more than probable that if the Exposition of 1851 had been suggested or patronized by any other person than the Prince,

they would neither have granted the site for the building, nor permitted a Royal Commission to be issued. Their scientific advisers, for it would seem that some persons assume such a title, had no doubt warned them that the patronage of such an institution would expose them to fresh demands from science and the arts, and gradually introduce that system of national organization which they had so zealously striven to oppose.

After treating of the origin of the Exposition, and making many important suggestions respecting the collection of subscriptions, the price of admission, and a variety of other topics, which, "even though unavailing for the present, may promote the interests of some future Exposition," our author enters upon the more interesting topic of the object and use of the Exposition :—

"The approaching Exhibition is considered by many as a great and splendid show, calculated to give pleasure and excitement to hundreds of thousands of persons. Even in this sense it would be beneficial, for it is always important that the pleasures of the people should be productive of some advance in their tastes and information. But its great and paramount value depends on other causes. Its object may be most concisely expressed by stating that—

"The Exposition is calculated to promote and increase the free interchange of raw materials and manufactured commodities between all the nations of the earth.

"Its object is not the exclusive benefit of England; and if any such mistaken view is still entertained, it may without hesitation be stated that it would be impossible by any mode of management to accomplish so selfish an object.

"The interest of every people is, that all other nations should advance in knowledge, in industrial skill, in taste, and in science. The advances made in the two latter subjects acquire *permanent* existence only through the *publicity* given to their enunciation and discussion. Refining and elevating all by whom they are received, new principles in taste or in science, as soon as they are accepted as truths, become the universal property of mankind.

"But although the Exposition itself could not and ought not to have been attempted for the sole benefit of this country, it is almost certain that England will reap the greatest share of its advantages. This will arise from the more extended system of her commerce, and from the habits of her people. The profits of the merchant, other circumstances being equal, depend upon the amount of his capital. Similarly, the knowledge brought back by the traveller in foreign countries, or derived from his observation in his own, will mainly depend on the stock of information he carried with him to give in exchange.

"To arrive at those principles by which the Exposition ought to

be regulated, it becomes necessary to examine the nature and extent of the interests involved.

“In all interchanges there are three distinct parties concerned—
 The Consumer,
 The Middle-man,
 The Producer.

“Consumers, including every human being, have a strong interest in the freest competition as producing the lowest price.

“Producers have an interest in selling their produce in the dearest market, and therefore claim free competition. But they have no advantage in selling it at the highest price: because a high price limits the extent of the sale. Their object is that the profit on each article, multiplied by the number sold, shall be the greatest possible.

“Middle-men, although usually averse to competition, have yet a direct interest in the amount sold.”—Pp. 41-43.

One of the first problems which the Commissioners had to solve, was to determine the nature of the articles which should have a place in the Exhibition. A certain limitation, however general it might be, was absolutely necessary before the size and character of the building could be fixed. The Committee do not seem to have imposed any limits upon those who might exhibit the productions of the soil, or of the interior of the earth. The space granted to nations as well as to individuals, was in this a sufficient bar against the accumulation of such articles. But in exhibiting specimens of the industry of the world, the Commissioners found it advisable to make a distinction between the *fine* and the *industrial* arts, which, though they at some points come into close approximation, are yet separated by a line sufficiently distinct.

“The fine arts and the industrial arts,” says Mr. Babbage, “although of the highest importance each to the other, are separated by a sufficiently definite line of demarcation, even at the points at which they most nearly approach. The characteristic of the fine arts is, that each example is an individual—the production of individual taste, executed by individual hands; the produce of the fine arts is therefore necessarily costly. The characteristic of the industrial arts is, that each example is but one of a multitude, generated according to the same law, by tools or machines, (in the largest sense of those terms,) moved with unerring precision by the application of physical force. Their produce is consequently cheap.

“The fine arts idealize nature by generalizing from its individual objects: the industrial arts realize identity by the unbounded use of the principle of copying.

“The union of the two, enlarging vastly the utility of both, enables art to be appreciated and genius to be admired by millions whom its single productions would never reach; whilst the spectator in return, elevated by the continual presence of the multiplied repro-

duction of the highest beauty, acquires a new source of pleasure, and feels his own mechanical arts raised in his estimation by such an alliance."—Pp. 47, 48.

According to this definition, as Mr. Babbage himself remarks, lace not produced by machinery would take its place among the fine arts, while statues made by machinery would be ranked among the industrial arts, the one being made by the united labour of individuals, and the other capable of being multiplied to any extent. In like manner, the beautiful oil prints of Mr. Baxter, and the chromographs, as they are called in the Catalogues of the articles exhibited by the Imperial Austrian Printing Establishment, belong to the industrial, while the originals from which they are copied belong to the fine arts.

The nature of the articles exhibited depends as much upon the character of the building which is to receive them, as it does upon their own individual character. In a building which admits the whole light of the sky, except where it is eclipsed by the beams of its carpentry, it would be impossible to make a favourable exhibition of pictures, while statues could be advantageously displayed. When an oil painting is illuminated from numerous points, or by broad beams of light, the varnished surface thus rendered visible destroys the finest touches of the artist, and removes the illusion which he had produced. In like manner, gems, such as the diamond, which derive their principal beauty from the prismatic spectra which they produce, lose all their charm when exhibited in a palace of crystal, while gems and precious stones, which derive all their beauty from their colour, are displayed to great advantage. The great Koh-i-noor or Mountain of Light, the Durra-i-noor or the Sea of Light, and the fine blue diamond of Mr. Hope, have less effect, as now exhibited by daylight, than a piece of glass of the same size and tint would have, if exhibited in a private room with two or three windows. In the spectra produced by broad luminous spaces, all the colours are recombined into white light, and hence the disappointment which every person has experienced at the first sight of these singular gems. Were the same gems to be worn by a lady in a drawing-room, with numerous bright lights, their effect would astonish the company.* The fine coloured refractions of the diamond disappear also under other circumstances. When the diamonds are very small, and set closely together, the numerous prismatic spectra which they produce are mingled, and produce white light on the retina of the

* Many intelligent persons mistook the hollow foil of its case for the great diamond itself.

eye, and this diminution of colour increases with the number of lights. When small diamonds, however, are at a sufficient distance from each other, they are seen to the greatest advantage when the lights are sharp and numerous.

As the sight of rare precious stones must always be exceedingly interesting, because they are never seen in collections of minerals, and when in the possession of individuals can only be seen by their private friends, it would have been desirable to place all the diamonds (as the Koh-i-noor is on Fridays and Saturdays) in a dark apartment illuminated by numerous small and brilliant lights. Till this was done with the Koh-i-noor, nobody had any idea of its purity and beauty, and indeed nobody till then could say that it was not a piece of glass.*

The existence of an exhibition in the National Gallery, both of painting and sculpture, was very naturally urged as a reason why neither paintings nor statues should be admitted into the Exhibition. The Commissioners, however, decided in favour of sculpture, and, as Mr. Babbage has stated, "the beautiful effect produced by the sculpture in the Crystal Palace has fully justified the decision." Under such circumstances we cannot see any reason for the rejection of pictures. There is at this moment ample room for a very large collection in the remote part of the foreign galleries, and it would have been easy to have obtained a beautiful illumination of them from the glass roof. A collection of the pictures of the best foreign living artists, selected by the Commissioners of their respective countries, would have been an object of great interest to all classes; and if such a collection had been made, the works of our own living artists would doubtless have found a place. The contemporaneous existence of two exhibitions of pictures would not have been attended with greater difficulties than the contemporaneous exhibition of two galleries of statues.†

Our author's chapter on the site and construction of the building contains many valuable suggestions. He proposed to place

* The introduction of ground glass globes into our apartments, however beautiful they may be as objects seen by the eye, destroy the beauty of all other objects. Silver and gold plate, and all other objects that derive their beauty from reflected light, lose their polish, and have actually the same appearance as if their surface was *ground*. The coloured spectra, too, produced by the diamond and other precious stones, are all *dimmed* as if they were seen through ground glass.

† Since this was written we have seen the admirable pamphlet of Mr. Spiridione Gambardella, entitled, "*What shall we do with the Glass Palace?*" in which he proposes "that the Crystal Palace shall remain in its present site, to be used (among other things) as a temple of art, one year for painters and one for sculptors," and that all the painters in the world shall be invited to compete within its walls in the summers of 1853-54. The author proposes that twelve prizes, at least, and of large amount, shall be adjudged by a jury of twenty-five qualified persons;

it on the eastern side of Hyde Park, on the open ground adjacent to "a narrow stripe near Park Lane, occupied by plantations, the circular reservoir, and garden;" and he shews by an accurate calculation, that upon the supposition that there will be *four millions* of visitors, five millions of miles will be uselessly traversed by placing it where it is, and a pecuniary loss incurred of £35,833. With regard to the building itself, Mr. Babbage highly approves of Mr. Paxton's design. "Amongst all the curious and singular products," he says, "which the taste, the skill, the industry of the world have confided to the judgment of England, there will be found within the crystal envelope few whose manufacture can claim a higher share of our admiration than that Palace itself, which shelters these splendid results of advanced civilisation. The building itself was regularly manufactured. Simple in its construction, and requiring the multiplied repetition of a few parts, its fabrication was contrived with consummate skill. The internal economy with which its parts were made and put together on the spot, was itself a most instructive study."

One of the most singular facts in the history of the Exposition of 1851, was the absolute prohibition by the Commissioners, that no exhibitor should affix a price to the articles which he exhibited. Mr. Babbage has treated this interesting question at great length, and has pointed out, with his usual talent, the absurdity and the injurious consequences of such a prohibition. So early as the 28th February 1850, Colonel Reid had recommended that "prices should be attached to the objects exhibited;" but in place of adopting this excellent recommendation, the Commissioners came to the decision, "that the prices are not to be fixed to the articles exhibited." The Chevalier Bunsen, in the name of the Prussian Government, the Leeds Committee, and the Hamburg and Danish Commissioners, all remonstrated against that decision, and declared that the statement of price was essential to the utility of the Exhibition. The Commissioners were thus induced to modify their decision so far as to permit the exhibitor to give their prices to the Commissioners or to the jurors, and to make cheapness of articles an element in the adjudication of prizes; but they sub-

and that the jury shall publish a general report, containing the names of the jurors who voted for each prize picture, and the reason for their votes. The "leading features of this plan are,—

- " 1. The free competition of artists.
- " 2. The selection of unimpeachable judges.
- " 3. The instruction of the people, and the cultivation of their taste."

We would recommend this remarkable pamphlet to the careful perusal of our readers. It is written by a distinguished artist, who unites the noble quality of high moral courage with the best qualities of a rich and cultivated intellect.

stantially adhered to their first decision, by declaring that prices must not be affixed to any article exhibited, even though there should be no other reason for exhibiting it than its price. The reason which the Commissioners themselves state for this regulation is, that if "they allowed the fixing the actual price to the articles themselves, they should be making themselves responsible for the accuracy of those prices in all instances;" but however much they were influenced by the weight of this responsibility, there is reason to believe that it was the powerful influence of the retailing shopkeeper and the middle-men that overcame the better judgment of the Commissioners. These men saw that their customers would stand aghast at the magnitude of their profits, but they might have trusted to the influence of reason and truth, which would have enlightened the public mind, and proved that their apparently large profits were necessary to meet the expense and the commercial risks of the retail trade.* The following observations of Mr. Babbage deserve to be studied by both parties.

"If *every article* had its price affixed, many relations would strike the eye of an experienced observer which might lead him to further inquiries, and probably to the most interesting results. But it is quite impossible for him to write to any considerable portion of 15,000 expositors for their list of prices, or even to go round and ask for it in the building itself.†

"Price in many cases offers at once a verification of the truth of other statements. Thus, to a person conversant with the subjects—

"The low *price* of an article might prove that it had been manufactured in some mode entirely different from that usually practised. This would lead to an examination of it, in order to discover the improved process.

* Mr. Babbage has given the following list of expenses to which the retail trader is subject :—

- " 1. Commission to broker or other middle-man.
- " 2. Cost of carriage from manufactory to shop.
- " 3. Rent of shop itself, and perhaps, also, of a warehouse.
- " 4. Insurance of stock against fire.
- " 5. Attendants to sell in shop.
- " 6. Sending goods home to purchasers.
- " 7. Expense of paper, string, &c., for packing goods delivered.
- " 8. Loss by plunder of servants.
- " 9. Expense of taking stock to diminish this loss.
- " 10. Goods soiled or injured by exposing to sale.
- " 11. Goods going out of fashion, cheapened by improved manufacture, or superseded by new inventions.
- " 12. Giving long credit.
- " 13. Bad debts.
- " 14. Payment for his own personal services, as retail trader.
- " 15. Interest on capital employed."

† Since Mr. Babbage's work was published, several detailed catalogues, with the prices of the articles, have been printed by the Commissaries of foreign countries.

“The *price* of an article compared with its weight might prove that the metal of which it is made *could not* be genuine.

“The *price* of a woven fabric, added to a knowledge of its breadth and substance, even without its weight, might in many cases effectually disprove the statement of its being entirely made of wool, or hair, or flax, or silk, as the case might be.

“The exchange of commodities between those to whom such exchanges may be desirable, being the great and ultimate object of the Exposition, every circumstance that can give publicity to the things exhibited, should be most carefully attended to. The price in money is the *most important element* in every bargain; to omit it is not less absurd than to represent a tragedy without its hero, or to paint a portrait without a nose.

“It commits a double error: for it withholds the only test by which the comparative value of things can be known, and it puts aside the greatest of all interests, that of the consumer, in order to favour a small and particular class—the middle-men.”—Pp. 79, 80.

In his *ninth* chapter, Mr. Babbage discusses the important subject of prizes. In the general plan settled at Osborne on the 14th July 1849, “it was proposed that the first prize should be £5000, and that one, at least of £1000, should be given in each of the *five* sections.” This proposal was, we think, wisely abandoned, and the amount to be given in prizes was fixed at £20,000, the sum subsequently named in the Royal Commission as the least that was to be expended on prizes and medals. The announcement on the Continent of this system of prizes excited universal astonishment, and many individuals made great personal sacrifices in the hope of carrying off one of these high rewards. Mr. Babbage is of opinion that “the effect of such rewards would be to increase very much the number of minds engaged in making inventions,” the inventor “being generally the least rewarded,” while “the capitalist, or the manufacturer of articles,” can almost always make his own way to wealth. Among the subjects which Mr. Babbage mentions as “fit subjects for prizes,” he enumerates “a small motive power ranging from the force of half a man to that of two horses, which might commence and cease its action at a moment’s notice, require no expense of time for its management, and be of a moderate price, both in original cost and in daily expense.” Such a power, he conceives, would be invaluable for the “men just rising from the class of journeymen to that of master,” and also “to small masters in many trades,” or “it might be applied to small planing and drilling machines, to lathes, to grindstones, grinding mills, mangling, and a great variety of other purposes.” To this Mr. Babbage adds an improvement on the lathe, by which it could be made to cut screws, plane small pieces of metal, and cut the

teeth of wheels. Mr. Babbage mentions other two desiderata, namely, the use of voltaic batteries as sources of light, and their application to the darkening and restoring of light by breaking and renewing the galvanic circuit. "Ready means," he adds, "might then be supplied of clearly distinguishing one lighthouse from another; and for this purpose, it would be necessary to denote the lighthouses on any coast by different numbers."*

It was at first the intention of the Royal Commissioners that several of the rewards should be money prizes, but it has been subsequently decided that the greater part of the £20,000 prize fund—at least £15,000—shall be given in medals, and that these medals shall be wholly of bronze. The great medal, which is to be given very sparingly, and for a very high degree of merit, is to have the value of about £2, 5s.; and the second medal, which is to be given very liberally, is to have the value of about £1, 10s. The number of great medals will probably not exceed 700, and the number of the other medals 4000 at the very utmost, which would correspond only to the sum of £6450—a very small portion of the Prize Fund. If we add to this a sum of £2000 for the silver medal, which it is proposed to give to each of about 310 persons, there will thus be left a large unappropriated portion of the fund devoted for prizes.

It has always been our opinion, and, we believe, to a considerable extent the opinion of the public, that the prizes should have been medals of gold or silver;—articles of real value, which the poor prizemaker could make available in his hour of necessity, or which the rich man could display with more satisfaction than he can do a large disc of bronze, however beautiful be its design and its execution.

In his *tenth* chapter, our author passes to the subject of the Juries by whom the prizes are to be awarded, and the principles and rules by which they should be guided in adjudging them. Since the publication of Mr. Babbage's work, the Royal Commissioners have arranged everything connected with the adjudication of the prizes with great sagacity. They have established thirty classes, containing about 312 jurors, one-half of which are British subjects, and the other half foreigners—some of these classes having one or more sub-juries. These

* Mr. Babbage states also that Sir David Brewster had proposed a plan for distinguishing lighthouses from one another numerically. When the light transmitted through a thin transparent film is analyzed by a prism, it appears either single, or divided into two, three, four, or more parts, according to its thickness. Mr. Babbage's contrivance, which we have seen in action, consists in eclipsing the light a certain number of times by the agency of a clock, and is applicable to signals, or to convey telegraphic messages either to vessels in distress, or for other purposes.

thirty classes are arranged into *six* groups;* and as a court of appeal there is a third body called the Council of Chairmen, composed of the chairmen of the thirty juries and sub-juries. The adjudication of the second medal is entrusted to each jury, subject to the approval of the group to which that jury belongs. The different classes name the individuals for the great medal; but its final adjudication, after being approved of by the group, is left to the Council of Chairmen. In this way, there is every reason to believe that the prizes will be awarded according to the merit of the articles exhibited. In order to avoid as far as possible the idea of individual or national competition, the juries have distinct instructions from the Council of Chairmen "that medals are to be awarded for articles possessing decided superiority, of whatever nature that superiority might be, and not with reference to a merely individual competition;" and that "the two classes of medals are intended to distinguish the respective characters of subjects, and not as first and second in degree of the same class of subjects."

The Medal Committee, consisting of Mr. Gladstone, Lord Lyttleton, Mr. Macaulay, and the Rev. H. G. Liddel, have recommended for the inscription on the *first* medal the following line, very slightly altered from Manilius :†

"Est etiam in magno quædam respublica mundo."

For the *second* medal the following line from Ovid :‡

"Dissociata locis concordî pace ligavit."

For the *third* medal, which has now been abandoned, the following line from Claudian :§

"Artificis tacitæ quod meruere manus."||

And for the *Jurors' silver* medal :

"Pulcher et ille labor Palma decorare laborem."

The selection of jurors for each foreign country was left to that country, and the number of jurors allowed to each foreign country was, upon the suggestion of the Foreign Commissioners, as follows :—

* 1. The Group of Raw Materials ; 2. The Group of Machinery, including Philosophical Instruments ; 3. The Group of Textile Fabrics ; 4. The Group of Metallic, Vitreous, and Ceramic Manufactures ; 5. The Group of Miscellaneous Manufactures ; and, 6. The Group of Fine Arts.

† Astronomicon, v. 737.

‡ Metamorph. v. 25.

§ Eidyll, vii. 20.

|| We cannot approve of any of these inscriptions. With regard to the first, the Americans *will* say, and the French *might* say, "This is our Republic." The second inscription would appropriately encircle the head of Prince Albert on the medal, but records only *one*, and that only a probable result of the Exposition. The third is quite inapplicable, as that medal was intended for exhibitors only.

France,	32	Turkey,	3
United States,	21	Spain,	3
Zollverein,*	19	Egypt,	2
Austria,	15	Holland,	2
Belgium,	11	Portugal,	2
Italy,†	6	Denmark,	1
Russia,	6	Sweden and Norway,	1
Switzerland,	4	Greece,	1
North Germany,‡	7		

In the very laborious and difficult task confided to the juries, they have been aided in the general transaction of their business by a person named by the Royal Commissioners for the purpose of explaining the rules of the Commission. The person thus named by the Commissioners was Dr. LYON PLAYFAIR, of whose talents, sagacity, and habits of business it is impossible to speak in terms of too high praise; and without undervaluing the great services of our English friends, we may be excused if, in a Scottish Review, we signalize the services of our countrymen, Colonel Reid, the Chairman of the Executive Committee, Mr. Scott Russell, one of the two secretaries to the Royal Commissioners, and Dr. Lyon Playfair, as having greatly contributed to the success of the Exposition of 1851.

The views which Mr. Babbage has given in his *eleventh* chapter, “on the ulterior objects” of the Exposition, have a peculiar value, and we have no doubt that the Royal Commission will gladly avail themselves of many of his suggestions. Mr. Babbage suggests that extensive collections should be made of examples of the industrial products in the Exhibition, and it appears that the French Chamber has already devoted 50,000 francs for the purchase of specimens. He proposes that specimens of all woven products should be arranged in books;—that coloured woven goods might be similarly arranged in regard to colour;—and that enamel colours on porcelain from different manufactories should be obtained from the manufacturer in small squares.

Among the higher advantages of the Exposition, Mr. Babbage justly ranks its influence over the mind, the taste, and the judgment of its visitors; and, while we call the attention of our readers to the following eloquent expression of his views, we would ask the young statesman, who has not yet imbibed the prejudices and displayed the ignorance of his teachers, to consider what will be the judgment of posterity upon the successive Governments of England, who have neglected, and systematically excluded

* Including Bavaria, Prussia, Saxony, Wurtemberg, &c.

† Comprehending Sardinia and Tuscany.

‡ Comprehending Bremen, Hamburg, and Hanover.

from office and from honours the class of men to which this extract refers :—

“Shew to the student,” says Mr. Babbage, “some mechanism effecting results apparently beyond the reach of the art, and he becomes impressed with the immense distance between his own intelligence and that which contrived it. Explain to him the simple means and the beautiful combinations by which it is effected, you then raise him in his own estimation, and the studious disciple thus instructed, will ultimately arrive at the conclusion that the only distance which is really *immense*, is that existing between the perfection of the highest work of human skill and the simplest of the productions of nature.

“In questions relating to taste the subject-matter is so idealized that the enthusiastic and the timid equally dread its contact with the more sober powers of reasoning, lest the process of analysis should disenchant its visionary scenes, and dissolve the unreal basis of their delight. Taste the most perfect, without a knowledge of the principles on which it rests, resembles the barren instinct of animals; like them, it gathers but little improvement from experience, and like them it perishes with the extinction of the individual life; its labours leave no inheritance to its race.

“Taste united with an intimate knowledge of its principles, and still more if conjoined with the power of eliminating from the fleeting relations amongst the objects of its attention, those resemblances which, when sufficiently multiplied and defined, lead up to the discovery of higher generalizations, confers upon its enviable possessor a double source of happiness; it adds the delight of an intellectual triumph to those romantic feelings which are excited by the beautiful, the lovely, or the sublime in Nature, or which are suggested by the most perfect representations of art.

“The comprehension of the cause of our pleasure renders us more acute to perceive those elements which conduce to its existence, to trace their connexion, to estimate their amount, to mould and to call up for the happiness of others and of ourselves their endless combinations.

“There is, however, for that rare union of judgment, imagination, and taste, which we call genius, when each exists in due proportion and in rich abundance, a yet higher object, a still nobler ambition. To have given to mankind those models, which, after twenty centuries, still rivet their attention, commanding unbounded admiration and defying rivalry, is indeed a splendid achievement, justly repaid by the undying fame which accompanies the names of those benefactors to mankind.

“But great as undoubtedly our gratitude ought to be for such gifts, it is trifling compared with that which civilized society would owe to him, who should instruct us in the *principles* that guided the intellect, as well as the hands of those by whom such immortal works were executed.

“In the fine arts, and in the arts of industry, as well as in the pursuits of science, the highest department of each is that of the dis-

covery of principles, and the invention of methods. To investigate the laws by which human intellect picks with caution its uncertain track through those obscure and outlying regions of our knowledge which separate the known and the certain from the unknown; to teach us how to cast as it were an intellectual and temporary connecting line across that chasm, by which a new truth is separated from the old—confident that when arrested by that isolated truth it will have fixed itself upon one solid point, amidst a floating chaos of error,—confident also that, when once the fixity of that single point has been assured, it is always *possible*, however formidable the task, to link it by innumerable ties to established knowledge, and thus to fill up the intervening space even to the very boundary of its enlarged domain:—to achieve such a conquest in any science surpasses all other discoveries, for it supplies tools for the use of intellect, and enlarges the limits and the powers of human reason.”—Pp. 123-126.

In contemplating the Exposition of 1851 in its results, we trust that Prince Albert may truly say in the terms of the inscription which we have mentioned:—

“Dissociata locis concordi pace ligavi.”*

It will indeed be one of the noblest results of this great reunion, should it effect among nations what it has already produced among individuals, the removal of jealousies that are temporary, and the establishment of friendships that are enduring. The annual meetings of the scientific men of all nations have already taught us that personal communication, and the interchange of social kindness, revive our better feelings, and soften the asperities of rival and conflicting interests. May they not even teach us that “lowliness of mind” under which “each may esteem others better than themselves?” Nations are composed of individuals; and that kindness and humility which adorn the single heart, cannot be real if it disappears in the united sentiment of nations. “It is not easy to believe,” as we have elsewhere had occasion to state, “that nations which have embraced each other in friendly intercourse, in the interchange of social kindness and professional knowledge, will ever recognise any other object of rivalry and ambition than a superiority in the arts of peace. It is not likely that men who have admired each other’s genius, and borrowed each other’s lights, and given just judgment on rival inventions, will ever again concur in referring questions of national right and national honour to the sanguinary arbitrament of war. Among the thousand instruments which hang beneath every banner that waves in the Crystal Palace, there is one which, though but spiritually discerned, escapes no eye and excites no envy: it is the calumet of peace—the little emblem

* What space separates the Exhibition unites.

of that universal brotherhood which we trust is about to dawn upon distracted and divided nations."

Among the other ulterior objects of the Exposition to which Mr. Babbage refers, we may mention as subjects of interesting discussion with our foreign visitors—the state of the Patent laws in every part of the world—the state of the English law of partnership, which presents great obstacles to the progress of the mechanical arts—and the universal language of mechanical notation,* "which will be, when generally employed, capable of being read by every people, just as the Arabic numerals are at present." These important topics, as he suggests, might be discussed by the Society of Civil Engineers, and at the Statistical Society; but we fear that the distracting occupations in the Crystal Palace, and in the society of the metropolis, are not very favourable to discussions of such overwhelming interest.

The eleven chapters of Mr. Babbage's volume which we have endeavoured briefly to analyze, relate strictly to the Exposition of 1851. The other six have a different character. They expose the intrigues of science, the dishonesty of party, and the selfishness, the ignorance, and the injustice of English Governments. If we look to the Exposition of 1851 as the world looks to it, as the beginning of a new era in which the arts of peace are to hold their due place in the national esteem, we cannot but consider these chapters as well calculated to promote so desirable a change. It is from the conduct of Government to individuals that we can alone infer the principles which guide them; and it is when these individuals have associated their name with great discoveries in science which the world has recognised, or with great inventions in the arts by which the world is to be benefited, that the cry of their grievances is likely to reach the royal ear, and to vibrate through the public heart. It is under such circumstances when the perpetration of injustice by men in power startles the judgment, and rouses the passions, that a ministry might be dismissed, and a ministry installed, when the one has persecuted genius by the intrigues, and the other is disposed to foster it by the love of science. The man, therefore, who throws himself into the breach, and compromises his tranquillity, and even his good name, by a personal appearance in his own cause, deserves that twofold gratitude which we so cheerfully extend to the warrior in command, who defends himself that he may defend his country.

Mr. Babbage himself tells us in special reference to these chapters, that several friends whose esteem he prizes, have urged him to avoid everything personal, and some even to suppress

* See Mr. Babbage's paper on this subject in the *Phil. Trans.*, 1826, v. 250.

his volume. While he values their friendship, he rejects their counsel. If such was the opinion of our author's friends, what must be the opinion of his enemies and the men whose principles he has censured, and whose intrigues he has exposed? The impartial critic and the disinterested reader will probably form an opinion differing from both. In questions of high import, the best friends are often the worst advisers. Overlooking the temperament and the social position of him whose ardour they seek to restrain, they balance the temporary interest and the transitory feeling of the individual against the lofty claims of truth and of knowledge; and without moral courage themselves, they would reduce a great mind to the level of their own pusillanimity. Actuated only by the feeling of the day, they forget the triumphs of the morrow. Inhaling the breath of living applause, and listening but to the rumour that flutters and dies, they are insensible to the voice of fame, and hear not from afar those deathless notes which announce the apotheosis of the martyred sage.

We wish it were in our power to give our readers such an account of the life and labours of Mr. Babbage as would enable them to form an accurate judgment respecting the circumstances under which he felt himself called upon to speak freely of his own Calculating Engine,—of the dishonesty of party,—of the intrigues of which he believes he has been the victim,—of the humiliating position of scientific men in England,—and of the honours and rewards which the British Government grudgingly give, when they do give them, and cheerfully withhold from the cultivators of science. The time has scarcely arrived when such an exposure can be advantageously made, but Mr. Babbage has done it with a sparing hand; and it is not from the fear of man, or the dread of official power, that we follow his example and repress our indignation.

When Mr. Babbage left Cambridge, the seat of his education, he resolved to devote his life to the pursuit of science. After travelling from time to time on the Continent, studying man as well as nature, he settled in the metropolis, enjoying the gay and the intellectual society which it affords, and himself the centre of a large and brilliant circle that statedly assembled in his house. He had long revolved in his mind the idea of a Calculating Machine, very different in its construction, and more extensive in its powers than the arithmetical machine of Pascal and of Leibnitz, and so early as 1822 he had constructed a small model of his Difference Engine. On the 3d of July in the same year, he sent Sir Humphry Davy a description of this model, which produced 44 figures in a minute, and performed with rapidity and precision all the calculations for which it was designed. On the 21st of May 1822, a committee of the more dis-

tinguished members of the Royal Society reported to the Lords of the Treasury that Mr. Babbage "was highly deserving of public encouragement in the prosecution of his undertaking;" and on the 23d of the same month, Mr. Babbage had an interview with the Chancellor of the Exchequer, in consequence of which £1500 was granted "to enable him to bring his invention to perfection." Under these circumstances he took measures for the construction of "the present Difference Engine," which were continued for four years. In this laborious undertaking, in which the most delicate drawings had to be made, and new tools formed, and workmen educated, Mr. Babbage was encouraged by the adjudication to himself of the first gold medal given by the Astronomical Society.

A large sum of the public money having been expended on the Engine, and the attention of the public directed to the fact, the Government consulted the Royal Society, who, on reporting favourably of the invention, "expressed their trust that while Mr. Babbage's mind was intently occupied on an undertaking likely to do so much honour to his country, he might be relieved as much as possible from all other sources of anxiety."* Upon this report the Government advanced more money, and the machine was declared national property. At this time some external influence seems to have affected the Lords of the Treasury, whose "official payments failed to meet the heavy and increasing expenses incurred by Mr. Babbage."† Under these circumstances it was represented to the Duke of Wellington by an influential committee of Mr. Babbage's friends,‡ dated May 12th, 1829, that he had expended £7000, while the Government had advanced only £3000. The result of this application was the further advance of £3000; and after other negotiations between the Treasury and the Royal Society, it was resolved that the workshops for the machine should be removed to Mr. Babbage's residence, and that Government should "*defray the further expense necessary for its completion.*" After the requisite buildings had been erected and £17,000 expended, new difficulties arose. Mr. Clement, the superintendent of the works, "withdrew from the undertaking, and carried off with him all the valuable tools that had been used in the work."§ From this and from other causes, the works were suspended, and what none of the parties could have anticipated, an event occurred which finally led to the abandonment of the Difference Engine. In 1834 the idea of executing analytical operations by

* Weld's *History of the Royal Society*, chap. xi.

† *Id. Id.*

‡ Including the Duke of Somerset, Lord Ashley, Mr. Herschel, &c.

§ Weld's *History of the Royal Society*, chap. xi.

an Analytical Engine occurred to Mr. Babbage, and in May 1835 he announced, through Mr. Quetelet, to the Academy of Science at Brussels, that he had "for six months been engaged in making the drawings of a new Calculating Engine, of *far greater power than the first*. Subsequently to the date of this letter, Mr. Babbage went to Turin, and explained to M. Menabrea and others the principles of his Analytical Engine. M. Menabrea sent an account of it to the *Bibliothèque Universelle*, and the same article, translated by Lady Lovelace, with copious original notes, was afterwards published in Taylor's Scientific Memoirs. The fact of Mr. Babbage having invented the Analytical Engine was communicated to the Government; but from various causes, with which we are unacquainted, their intentions could not be ascertained. In October 1838, Mr. Babbage applied in vain to Mr. Goulburn, to learn if it was the desire of Government that he should superintend the completion of the Difference Engine which had been suspended for five years. No answer having been made to this new application, Mr. Babbage, both by himself and through his friends, applied to Sir Robert Peel, who announced to him through Mr. Goulburn the resolution of Government to abandon the completion of the machine.

In parting with Mr. Babbage, Sir Robert Peel seemed disposed to do him a favour. He proposed to withdraw all claim on the part of the Government to the machine as at present constructed, and by placing it at his entire disposal *to assist in some degree his future exertions in the cause of science*. Mr. Babbage declined to accept of the offer thus made, and the Difference Engine, as it then stood, was placed in the Museum of King's College, London.

Thus terminated Mr. Babbage's connexion with the Government in reference to the Difference Engine, which, on the ground of "*the expense*," they refused to complete, and to the Analytical Engine, which they did not offer to construct. No mark of kindness, and no expression of thanks for years of incessant and unpaid labour, accompanied an event which will long be deplored in the annals of science. It was assumed by the Government that Mr. Babbage would continue "his exertions in the cause of science," and to assist him in his exertions he was offered the fragment of the machine, which the same Government were bound in honour to have completed. It will not be readily believed, even by the most credulous, that a man like Sir Robert Peel could have thus acted if left to the native impulses of his own generous nature. It will scarcely be doubted, even by the most sceptical, that the Government acted under the advice of some jealous rival or some concealed enemy; and that they

renounced the services of Mr. Babbage, because they were assured that these services would be of no advantage to the country. Had financial adversity, or the dread of parliamentary opposition, prevented the Minister from granting a few thousand pounds for the completion of a great and a useful invention, there were many ways in which the justice and the liberality of the State might have been dispensed. Mr. Babbage's own views of the matter will be seen in the following extract :—

“ After eight years of repeated applications, and of the most harassing delay, at the end of 1842 the Government arrived at the resolution of giving up the completion of the Difference Engine, on the alleged ground of its expense.

“ In the meantime, new views had opened out to me the prospect of performing purely algebraic operations by means of mechanism. To arrive at so entirely unexpected a result I deemed worthy of any sacrifice, and accordingly spared no expense in procuring every subsidiary assistance which could enable me to attain it. Each successive difficulty was met by new contrivances, and at last I found that I had surmounted all the great difficulties of the question, and had made drawings of each distinct department of the Analytical Engine.

“ Having expended upwards of £20,000 on the experiments and inquiries which had led me to these results, it would not have been prudent to attempt the construction of such an engine. I thought, however, that there were several offices in the appointment of Government for which I was qualified, and to which, under the circumstances, I had some claim. I hoped if I had obtained one of these, by fulfilling its laborious duties for a few years, and by allowing the whole salary to accumulate, that I might then have been able to retire ; and adding the money thus earned to my own private resources, that I might yet have enough of life and energy left to execute the Analytical Engine, and thus complete one of the great objects of my ambition.

“ Having neither asked nor been offered any acknowledgment for all the sacrifices I had made, I felt that I had some just claims to one of these appointments.”—Pp. 152, 153.

For such appointments, however, every application, as Mr. Babbage informs us, was unsuccessful. A Government which knows so well how to reward its political friends, would have found no difficulty, if they wished it, in effectually “ assisting Mr. Babbage's future exertions in the career of science.” Offices for which he was well qualified, and which he would have filled to the benefit of his country, were given to others who had never served it ; and those rewards and honours which were freely lavished on others, were systematically withheld from him. Two vacancies occurred in the Register-Generalship of Births, &c., an office for which Mr. Babbage was especially qualified. Other

two arose in the Commissionerships of the Railway Board,* and another in the Mastership of the Mint; but though Mr. Babbage and his friends made application for the two last of these offices, the applications were either unnoticed or refused.

Even the Royal Society, who had so many honorary rewards in their power, and who had repeatedly urged the Government to complete the Difference Engine, seems to have been struck by the same malign influence; and the British Association, in which Mr. Babbage held the office of auditor, and to which he made the valuable addition of a statistical section, was induced to treat him with disrespect, and occasion his resignation.

Mr. Weld, from whose interesting chapter on the Calculating Machine we have derived much of our information respecting the history of the Difference Engine, considers it due to Mr. Babbage to state, "that he refused more than one highly desirable and profitable situation, in order that he might give his whole time and thoughts to the fulfilment of the contract which he considered himself as having entered into with Government." His early friends who had started with him in the race of life, had risen to high situations in the Church, in the Universities, or at the Bar, while he who preferred the humbler though nobler career of philosophy,—who sacrificed wealth to fame, and who in that sacrifice honoured and served his country,—stands alone without promotion or reward,—a beacon to remind statesmen of their ingratitude,—and to warn genius of its fate.

With these facts in view, our readers will readily understand why Mr. Babbage has written the closing chapters of his work on the intrigues and position of science—on the influence of the press and of party—and on the rewards which England grants to her intellectual servants; and they will understand also why these chapters have found a suitable place in an account of the Exposition of 1851.

In the details of a controversy, which had the unusual character of being at once legal and scientific, Mr. Babbage found what he regarded as proofs, that certain parties who had the confidence of Government, had advised them to discontinue the Calculating Engine, and had by false representations of his character interfered with his future advancement. The charges thus made by our author in his chapter on the Intrigues of Science, remain at this moment uncontradicted; but in a matter so deeply affecting individual and even national character, we must withhold our opinion till both parties are fairly in

* Mr. Babbage had, at great expense, and even at the risk of his life, made a series of valuable experiments on the Great Western Railway, on the subject of the broad gauge.

the field. There are facts, indeed, within our own knowledge, and which will doubtless appear in the future biography of individuals, which place it beyond a doubt that there is an influential party in England who, themselves in office, or in affluence, have no feeling for their humbler rivals, and who not only oppose every public measure which might elevate the condition of unbefriended genius, but who directly interfere with its professional advancement. If such a party have any influence over the Government, it is time that the Government should know it; and if that influence is injurious to the nation, as every secret and irresponsible influence must be, it is time that the Legislature should put it down, and it is more than time that they should organize some responsible institution to superintend the science of the country.

In his *fourteenth* chapter, on the Position of Science, Mr. Babbage thus describes "the present situation of men of science in England :"—

"The estimate which is formed of the social position of any class of society, depends mainly upon the answer to these two questions :—

"What are the salaries of the highest offices to which the most successful may aspire ?

"What are the honorary distinctions to which the most eminent can attain ?

"Offices of a strictly scientific nature are few, and their salaries are generally of small amount ; amongst these there are—

"A few of the professorships at our Universities.

"The Astronomer-Royal.

"The Astronomers of some of our Colonial Observatories.

"The Master of Mechanics to the Queen.

"The Conductor of the Nautical Almanac.

"The Director of the Museum of Economical Geology and of the Geological Survey.

"Various officers of the same institution.

"Some of the officers in the Natural History department of the British Museum.

"The most valuable of these, that of Astronomer-Royal, receives about £1300 a-year, including a pension of £300.

"Thus there is amongst this class one solitary prize of, at the utmost, £1300 a-year, and that is confined to one department of science.

"Offices for which men of science are at least as fit as any other class, are numerous, though they are very rarely attained by those who pursue it.

"It may, perhaps, have been expected that the recent appointment of Sir John Herschel to the Mastership of the Mint, should have been noticed in the previous list. But until the motives which dictated it are known, I have no observation to make, except that it is gratifying to me to find that the great principle of the 'claims of science,' for which I have all my life been contending, has been thus, as it were,

unconsciously, admitted by the Minister ; and had the accident of birth placed me in his position, the appointment would have been the same, although the motives for it might have been different.

“ Let us now turn to the *honorary distinctions* which await science. During the eleven years of the present reign, one solitary instance is to be found of a baronetcy given for science, and that too occurred only at a festival (the coronation) at which baronetages and peerages were showered upon those whose sole claim was founded on the mere support of party.

“ During the same interval, about half-a-dozen of those who cultivate science have been knighted.

“ It appears then that the highest position a man of science can attain, and that but very rarely, is a baronetcy ; that the highest salary is about £1000 a-year. When this is compared with the most successful prizes in the army, the navy, the church, or the bar, it shows at once the inferior position occupied by science.”—Pp. 173-175.

But though there are few institutions in England open to men of science, there are many of a secondary and temporary kind, in which a knowledge of various branches of science is useful, if not absolutely necessary. To these situations “ officers of engineers, of artillery, and of other corps of the army and the navy have been appointed, to the exclusion of scientific men ; and those very individuals who, from the nature of their profession, may rise to high and well-paid offices, and receive the high honours which custom permits them to receive, thus usurp the position of that very class from whom office and honour are equally withheld.” “ Thus,” says Mr. Babbage, “ those whose service is already paid for by the country, are excused from doing their ordinary duty, and are paid again for doing another, and perhaps a more agreeable duty. Under the delusive plea that *military* and *civil* engineering are the same science, military engineers have been placed in situations for which they were unfit, and civil engineers have been excluded, to the injury of that profession, and to the much greater damage of the country.”

In treating the question how equally great discoveries should be rewarded when the discoverers occupy different ranks in society, Mr. Babbage makes an interesting allusion to the noble services which the Earl of Rosse has rendered to science.

“ Those who maintain that science is its own reward, cannot have remarked the vicious circle in their reasoning. The delight derived from discovery is indeed a high intellectual reward, but the force of this maxim is only known practically to those who have already advanced in the career of discovery : it can, therefore, never direct the course into that line. All men are subject to the same feelings and passions. It is certainly true that men of wealth and rank will be

happier if they cultivate their faculties, and add to the amount of human knowledge ; but they cannot know this truth until they have already advanced, consequently it cannot have induced them to commence this cultivation.

“ But it is the interest of those who are the consumers of knowledge, that all other minds should be induced to advance it ; therefore it is our interest to place, even before the highest classes, motives for its pursuit at the commencement of their career. Having raised such expectations, justice compels us to fulfil them ; nor can we regret that the advantages derived from the course into which we have invited them should have proved beneficial to them beyond even the limits of our prediction.

“ It is of the very nature of knowledge that the recondite and apparently useless acquisition of to-day, becomes part of the popular food of a succeeding generation. Thus, the nobleman who spends his wealth in constructing unrivalled instruments, and his nights in scrutinizing with them the remotest boundaries of space into which human vision has yet penetrated, is preparing a source of pleasure and happiness for the descendants of those very peasants whom his practical skill in engineering has raised, by his own instructions, above the ranks in which he originally found them.*

“ Another question has been raised, but not yet answered, respecting those pensions which have been awarded for scientific discoveries. A certain definite limit has been fixed by practice, which has never yet been exceeded when assigned to science. The sum of three hundred a-year, the maximum of reward to science, is almost the minimum of reward for other qualifications.

“ The most important question is, Whether these pensions are given as the reward of scientific services rendered to the country, or as charity to enlightened and studious persons who are poor ? In the one case, they are an honour which a philosopher may be proud of receiving from his country ; in the other, they are no more than a higher order of pauper relief, which an independent gentleman can scarcely condescend to accept. . . .

“ For the honour and the advancement of science, it is necessary that these questions should be distinctly answered. It is to be hoped that some independent member of parliament will at last press them in a manner which no ministerial shuffling can evade.”—Pp. 180-183.

Mr. Babbage's last chapter, on the Honours and Rewards of Merit, will, we trust, be read with peculiar interest at a time when the Great Exhibition has displayed to men of all ranks and views the fruits of British science and the products of British industry. Nowhere will the statesman see with a clearer eye the intimate connexion between the deepest science and the homeliest as well as the highest industry. Researches in chemistry the most profound form the basis of the most useful arts ; and the micrometer,

* We have no doubt that Lord Roese is here alluded to.

which the astronomer long regarded as his own peculiar instrument, now stands in the workshop—the auxiliary of the mechanical engineer. If the arts of England are the source of her greatness, where can that greatness be so well displayed as in that chamber of mechanism where we see every machine between that which pierces the eye of the needle and that which cuts and perforates the most solid iron? And if the products of that machinery constitute the wealth of England, where can we count its millions more certainly than in the corridors hung with its gorgeous fabrics, and in the crystal halls which shine with its precious metals? And if that greatness is to be maintained, and that wealth increased, the statesman must be taught what he is so unwilling to learn—to foster the genius from which they spring, and give its possessor his true place among the other servants of the State. How and when that lesson is to be taught are problems that remain to be solved, and the art of solving them will, we trust, be acquired by the millions who visit the Crystal Palace:—And what that position is to which the intellectual patriot has yet to rise, may be gathered from the powerful argument of Mr. Babbage, and the eloquent appeal which he has made to the noblest sympathies of his countrymen.

“The personal distinctions in the gift of the Government of this country consist of the following five orders of knighthood:—

NAME.	NO. OF MEMBERS.		
	Grand Cross.	Knight Com.	Comp.
The Garter,*	25		
The Thistle,	16		
St. Patrick,	16		
The Bath { Military, . .	50	102	525
{ Civil,	25	50	200
St. George and St. Michael,†	15	20	25
	147	172	750

“Of these the first three are restricted, with few and rare exceptions, to persons of a certain rank—including earls, and those above them.

“Thus England has, practically, only one order of merit; and singularly enough, with the exception of a few civil crosses of the first class, almost invariably given for diplomatic service, until lately that order was accessible to any other than military merit.

* “An amusing and characteristic anecdote respecting one of these Orders, the Garter, is related of a late Premier. At a time when several of these ‘baubles’ had fallen vacant, and been judiciously given away by the discreet minister, a friend asked him, why he had not retained a Garter for himself? to which he wittily replied, ‘Why, the fact is, I don’t see the use of a man’s bribing himself.’” —P. 203.

† Instituted for the Ionian Islands.

“In countries, however, which we fondly flattered ourselves were less advanced in civilisation than our own, the vulgar notion of paying homage to brute force has long been superseded by a more just appreciation of the elements of military glory. Nations even the most ambitious of this species of renown, have admitted that physical prowess, that recklessness of personal danger, form but the smallest amongst those qualities which contribute to military success.”

After a beautiful compliment to the Duke of Wellington, whose military genius is justly regarded as intellectual, and such as would have distinguished him in many different careers, our author thus proceeds :—

“It is not uninteresting to observe in society the opinions of its different classes respecting honours conferred on science. Military and naval men, especially the most eminent, feel that genius is limited by no profession, and themselves sympathizing with it, would gladly hail as brothers in the same distinction the philosopher and the poet. With lawyers the case is reversed ; genius dwells not in their courts : industry and acuteness, monopolized by one absorbing professional subject, exclude larger views ; and ribbons not being amongst the honoraria of their own profession, they reprobate their application to science. To this there are, however, some noble exceptions. Men of larger experience and of views more extended than their profession usually produces, and who are themselves qualified to have become discoverers and reformers in other sciences, are yet among the brightest ornaments of their own. It is much to be regretted when such powers are applied to the mere administration, instead of to the reformation, of the laws of their country.

“It is difficult to pronounce on the opinion of the ministers of our Church as a body ; one portion of them, by far the least informed, protests against anything which can advance the honour and the interests of science, because, in their limited and mistaken view, science is adverse to religion. This is not the place to argue that great question. It is sufficient to remark, that the best informed and most enlightened men of all creeds and pursuits, agree that truth can never damage truth, and that every truth is allied indissolubly by chains more or less circuitous with all other truths ; whilst error, at every step we make in its diffusion, becomes not only wider apart and more discordant from all truths, but also has the additional chance of destruction from all rival errors.”—Pp. 204-207.

Our waning limits will not permit us to follow Mr. Babbage through the rest of his chapter. He places before us the undeniable facts that it is not the people of England, but the occupants of place, and the chiefs of party, and the members of a hard-hearted and well-paid clique of scientific men, who oppose the organization of science, and the elevation of its cultivators. He warns the men who “refuse to science the means of acquiring competence, exclude it from personal honours, and refuse

it hereditary rank, because it has not devoted itself to the acquisition of wealth," that they will thus give rise to grave questions which it would be wise to avoid. In reply to the puerile assertion that the dignity of science is incompatible with wealth, and that decorations and titles are unworthy of its legitimate ambition, he justly asserts "that all pursuits which are deemed of a higher order, are still more absolutely excluded from such vanities; and that the members of a Christian Church, its bishops and deacons, should neither be loaded with wealth nor decked with ribbons." * With equal truth he might have added that the intellectual general who never drew his sword, and the profound judge who never sought for wealth,—the patriot statesman whose mind perished for his country, and the philanthropic nobleman who has intellectually created around him a moral and a contented population, should each, in virtue of their high intelligence, disregard the emoluments and the honours of the State. The proposition which we thus assail, when reduced to its simplest form, is, that wealth and honours to men of talent and genius are unenviable and worthless possessions. We admit the Utopian truth; and were any attempt made to give it an impartial application, the honours and the rewards of the State would be no longer withheld from science.

Mr. Babbage has justly said that the views which we have been opposing are those of "the shallow and the thoughtless," and that though the "pursuits of mind may modify, they can never obliterate the instincts, the feelings, or the passions of man." There may, indeed, be some rare instances in which a philosopher "may have personally little ambition to attain the honours which the rest of the world covet; but he may be bound by other ties which link him inseparably to the present."

"He may look," as Mr. Babbage in the conclusion of his volume touchingly observes, "with fond and affectionate gratitude on her whose maternal care watched over the dangers of his childhood; who trained his infant mind, and with her own mild power, checking the rash vigour of his youthful days, remained ever the faithful and respected counsellor of his riper age. To gladden the declining years of her who, with more than prophetic inspiration, foresaw as woman only can, the distant fame of her beloved offspring, he may well be forgiven the desire for some outward mark of his country's approbation.

"If such a relative were wanting, there might yet survive another parent whose less enthusiastic temperament had ever repressed those fond anticipations of maternal affection, but who now in the ripeness of his honoured age, might be compelled, with faltering accents, to

* Two archbishops, one bishop, and two deans, wear decorations of orders of knighthood.

admit that the voice of the country confirmed the predictions of the mother.

“Perhaps another and yet dearer friend might exist, the partner of his daily cares, the witness of his unceasing toil; whose youthful mind, cultivated by his skill, rewards with enduring affection those efforts which called into existence her own latent and unsuspected powers. When driven by exhausted means and injured health almost to despair of the achievement of his life’s great object—when the brain itself reels beneath the weight its own ambition had imposed, and the world’s neglect aggravates the throbbings of an over-tasked frame, an angel spirit sits beside his couch ministering with gentlest skill to every wish, watching with anxious thought till renovated nature shall admit of bolder counsels, then points the way to hope, herself the guardian of his deathless fame.

“The fool may sneer, the worldly-wise may smile, the heartless laugh,—the saint may moralize, the bigot preach: there dwells not within the deep recesses of the human heart one sentiment more powerful, more exalted, or more pure than these.

“That man is not a statesman who is unaware of the strength of these powerful excitements to human action. Cold and incapable of such sentiments himself,—no grasp of intellect enables him to infer their existence, and to supply the deficiencies of his own, by an insight into the hearts of others.

“That man is a fool, not a statesman, who, knowing their strength, hesitates to avail himself of it, for the benefit of his country and of mankind.

“But if there should arise a man conscious of their power, who yet should dare to use it for the purposes of party, that man will combine in his character the not incongruous mixture of statesman and of knave. A statesman he may be if he can penetrate into the character of men, and can divine the action of human motives upon the masses, as well as on the individuals of his race. With such knowledge, and with the talent that its possession implies, he cannot be a fool; except, indeed, in so far as he is entitled to credit for that limited amount of folly which is inseparably attached to him in his other character of knave. It is *possible* that he may be successful in his day; it is *certain* that he will ultimately be found out and disgraced in the eyes of posterity. His name may remain a beacon for a time, until some greater or more recent knave supersedes his example, and thus consigns him to oblivion.

“It is not, then, the gaudy ribbon, the brilliant star, the titled name, that have intrinsic charms for him who dedicates his genius to the search for truth. How large a portion of his real greatness, even of his most splendid discoveries, would he not willingly sacrifice to confer on those he loves that exquisite happiness, which arises only when hidden but long-cherished convictions, entertained diffidently from the consciousness of partial affection, receive at length their final confirmation by that decision which national acknowledgment can alone command!”—Pp. 228-231.

Such is a brief analysis of Mr. Babbage's volume on the Exposition of 1851,—itself one of the first and best results of that great Panorama of the World's Industry. The most ardent admirers of the Exhibition, and even those who were the most deeply interested in its success, could not have pronounced upon it a higher eulogy than that which breathes through every page of his work. Warm with feeling, and adorned with eloquence, the sentiments which this volume contains will influence the future more than the present, and when the controversies of the hour have ceased, and its interests have expired, posterity will pronounce a righteous judgment upon the truths which it speaks, and the cause which it pleads.

Nor is it without its moral, that while a distinguished philosopher has been advocating against the Government of the day the claims of science, a distinguished artist* should have been pleading the cause of art against the same men,—its hollow and its shallow patrons. Martyrs at the same stake, Art and Science have risen in allied resistance to their common foe, and marching as they do under the Royal banner of the Exposition, they will not lay down their arms till they have achieved a joint and a glorious triumph.

We have already alluded to the advantages which men of science and their institutions, and through them the nation and the world, will derive from the great and successful experiment of the Exhibition. The Ministers of England, who have hitherto been the advisers of the Crown, however great have been their talents in debate, and their sagacity in administration, have been pre-eminently ignorant of science and the arts. Even now they are only beginning to recognise (and act feebly on the recognition) the influence of education and of knowledge in the peace and happiness and prosperity of nations. Science they have ever viewed, as they still do, through the mist of official prejudice, and the cloud of personal ignorance; and though they have thrown some crumbs from the Treasury table,—perchance to gain a little credit with the public,—perchance to calm the indignation of a political adherent, they have nevertheless refused, though urged by the two greatest scientific institutions of the country, to grant a small sum out of their financial surplus to promote one of the most interesting objects of astronomical research.†

* M. Gambardella, in the pamphlet already referred to in note, p. 543.

† “ In consequence of the discovery of new planets, and new satellites, and new forms of nebulae, by the united exertions of astronomers, the British Association, at two of its meetings, resolved to apply to Government for the means of constructing a large reflecting telescope, to be employed in a southern climate for the

However discouraging to the friends of science, this very refusal may prove the ground of its future triumphs. Contemporaneous with the Exposition, this apathy of the Minister stands in painful contrast with the conduct of his Royal Mistress. A sovereign studying the sciences and the arts in the same school with the humblest of her subjects—a school, too, founded by her Royal Consort, is a sight new in the annals of England. The lofty genius of which she has seen the development, and the matchless skill of which she has admired the results, cannot be to her an object of indifference, or even of temporary gratification. Herself honoured by her country's genius, she cannot but feel for it a reciprocal regard. Herself the fountain of honour, she cannot but dispense a portion of its fulness to enlarge the springs by which it is fed. Round a throne thus enlightened, and thus liberal to the highest efforts of the mind, there will necessarily be found enlightened counsellors and sagacious guardians. Round the altar which that throne defends, there will stand an enlightened priesthood, acknowledging science as its handmaid—accepting her truths as auxiliary to its own—tolerant as knowledge is ever tolerant, and regarding the education and instruction of their flocks as the best passport to that land of rest which is reserved for the wise and the good. The scientific institutions of England will then take their place beside the institutions of other lands,—her philosophers will appear, like theirs, in the positions which they merit, and with the decorations they have achieved,—a contented population will surround an enlightened throne, and glory in an enlightened sovereign, and thus perpetuate institutions which the ignorance of the people alone can assail, and the ignorance of a Government alone can overturn.

advancement of astronomy. In making this application, our late distinguished President, Dr. Robinson, informed Lord John Russell that an assembly of 1500 persons, among whom were found almost every British name of scientific renown, had received this proposal with enthusiastic approbation. Dr. Robinson assured his Lordship that such a grant was demanded by public feeling, and that it belonged to the rulers of the freest and most enlightened nation in the world to give that encouragement to physical science which the spirit of the age had obtained from the most despotic sovereigns of Europe. The Earl of Rosse, and the Royal Society, seconded this application; and as no preceding Government had refused any of the requests of the British Association, we looked forward with confidence to the realization of a scheme which would have added to the conquests of science, and thrown a fresh lustre over the British name. I regret, however, to say, that in a year of great financial prosperity, this application has been refused, and as it is not possible in matters of science that any secret or sinister influence could affect the judgment of a statesman, we must suppose that Lord John Russell has some better object in view to advance the interests of science, and promote the intellectual glory of the nation.”—*Sir David Brewster's Address at Ipswich*.

APPENDIX.

We are enabled, through the kindness of the Secretary to the Royal Commissioners, to present our readers with the following interesting RETURN OF RECEIPTS at the Crystal Palace. The Number of Persons who have visited the Exhibition may readily be calculated from the data in the Table.

DATE 1861.	Number of Season Tickets sold.			Amount.	Receipts at the Doors.	
	Gentlemen.	Ladies.	Total.		Rate.	Amount.
Previous to May 1	10,892	8,616	19,507	£52,401 6 0		
" 2	249	283	532	1,878 18 0	£1	£560 0 0
" 3	166	253	419	1,054 4 0	£1	482 0 0
" 5	144	188	282	743 8 0	5s.	1,862 19 0
" 6	187	214	351	880 19 0	5s.	1,458 10 0
" 7	143	229	372	921 7 0	5s.	1,790 15 0
" 8	157	198	355	910 7 0	5s.	2,018 0 0
" 9	141	208	349	880 19 0	5s.	1,824 10 0
" 10	146	190	336	858 18 0	5s.	1,843 15 0
" 12	128	165	293	749 14 0	5s.	1,597 10 0
" 13	135	224	359	896 13 0	5s.	2,229 10 0
" 14	103	127	230	591 3 0	5s.	2,064 15 0
" 15	104	169	273	682 10 0	5s.	2,426 0 0
" 16	104	166	270	676 4 0	5s.	2,556 10 0
" 17	83	141	224	557 11 0	5s.	2,472 5 0
" 19	71	126	197	488 5 0	5s.	2,345 0 0
" 20	52	89	141	350 14 0	5s.	3,860 15 0
" 21	44	67	111	279 6 0	5s.	3,512 5 0
" 22	31	87	68	175 7 0	5s.	3,797 11 0
" 23	18	87	55	134 8 0	5s.	4,096 10 0
" 24	22	41	63	155 8 0	5s.	5,078 0 0
" 26	8	7	15	89 18 0	1s.	920 2 0
" 27	3	5	8	19 19 0	1s.	1,347 17 0
" 28	3	2	5	13 18 0	1s.	1,869 4 0
" 29	5	■	8	22 1 0	1s.	2,875 18 0
" 30	11	13	24	61 19 0	2s. 6d.	2,839 9 0
" 31	12	28	40	96 12 0	5s.	1,770 15 0
June 2	8	2	■	13 18 0	1s.	2,129 1 0
" 3	2	2	4	10 10 0	1s.	2,415 2 0
" 4	---	9	9	18 18 0	1s.	2,500 16 0
" 5	4	3	7	18 18 0	1s.	2,566 17 0
" 6	5	8	13	32 11 0	2s. 6d.	2,568 11 0
" 7	3	13	16	36 15 0	5s.	1,523 15 0
" 9	---	1	1	2 2 0	1s.	2,436 4 0
" 10	1	3	4	9 9 0	1s.	2,272 2 0
" 11	---	2	2	4 4 0	1s.	2,160 19 0
" 12	3	3	6	15 15 0	1s.	2,283 7 0
" 13	6	■	16	39 18 0	2s. 6d.	2,206 5 0
" 14	6	3	14	35 14 0	5s.	1,634 17 0
" 16	3	1	4	11 11 0	1s.	2,854 9 0
" 17	3	1	■	11 11 0	1s.	3,191 2 0
Carry over	13,151	11,841	24,992	£66,280 15 0		£20,692 12 0

DATE. 1851.	Number of Season Tickets sold.			Amount.	Receipts at the Doors.	
	Gentlemen.	Ladies.	Total.		Rate.	Amount.
Brought over,	13,151	11,841	24,992	£86,290 15 0		£90,892 12 0
June 18	3	5	8	19 19 0	1s.	2,897 7 0
" 19	1	4	5	11 11 0	1s.	2,984 12 0
" 20	1	16	17	36 15 0	2s. 6d.	2,819 4 6
" 21	4	10	14	33 12 0	5s.	1,674 10 0
" 23	...	1	1	2 2 0	1s.	8,016 11 6
" 24	1	6	7	15 15 0	1s.	8,186 12 0
" 25	...	2	2	4 4 0	1s.	2,691 14 0
" 26	1	1	2	5 5 0	1s.	2,722 10 0
" 27	...	2	2	4 4 0	2s. 6d.	2,969 6 0
" 28	2	5	7	16 16 0	5s.	1,590 16 0
" 30	...	...	...	...	1s.	2,469 16 6
July 1	1	1	2	5 5 0	1s.	2,429 10 0
" 2	3	1	4	11 11 0	1s.	2,863 18 0
" 3	2	2	4	10 10 0	1s.	2,651 19 0
" 4	3	6	9	22 1 0	2s. 6d.	2,592 2 6
" 5	2	5	7	16 16 0	5s.	1,565 15 0
" 7	...	...	...	...	1s.	2,852 2 0
" 8	...	1	1	2 2 0	1s.	8,169 5 0
" 9	2	1	3	8 8 0	1s.	2,710 6 0
" 10	2	...	2	6 6 0	1s.	2,958 0 0
" 11	1	7	8	17 17 0	2s. 6d.	8,145 17 6
" 12	2	1	3	8 8 0	5s.	1,589 15 0
" 14	1	...	1	8 8 0	1s.	2,957 8 0
" 15	1	2	3	7 7 0	1s.	8,502 1 0
" 16	1	...	1	8 8 0	1s.	2,910 4 0
" 17	1	2	3	7 7 0	1s.	8,023 5 0
" 18	3	4	7	17 17 0	2s. 6d.	3,762 7 6
" 19	2	6	8	18 18 0	5s.	1,360 15 0
" 21	2	...	2	6 6 0	1s.	3,338 7 0
" 22	...	5	5	10 10 0	1s.	8,286 2 0
Total,	13,193	11,987	25,180	£86,625 13 0		£171,824 11 0

The following TABLE shews the Total Number of Persons who have visited the Exhibition daily, including Staff, Attendants, &c.

May 1,	25,000	May 22,	31,893	June 12,	49,818	July 8,	55,638
" 2,	15,560	" 23,	32,357	" 13,	24,520	" 4,	28,000
" 3,	15,482	" 24,	44,512	" 14,	14,102	" 5,	11,747
" 5,	17,756	" 25,	25,402	" 16,	68,769	" 7,	61,670
" 6,	18,156	" 27,	30,000	" 17,	68,154	" 8,	65,962
" 7,	19,479	" 28,	40,605	" 18,	62,663	" 9,	58,055
" 8,	21,072	" 29,	51,888	" 19,	68,863	" 10,	61,429
" 9,	19,614	" 30,	45,669	" 20,	81,834	" 11,	80,067
" 10,	22,176	" 31,	28,550	" 21,	12,732	" 12,	11,181
" 12,	21,322	June 2,	46,290	" 23,	6,755	" 14,	62,694
" 13,	23,945	" 3,	50,629	" 24,	68,894	" 15,	74,122
" 14,	23,890	" 4,	54,635	" 25,	58,545	" 16,	60,626
" 15,	25,231	" 5,	55,254	" 26,	57,781	" 17,	63,746
" 16,	26,030	" 6,	26,134	" 27,	29,083	" 18,	35,338
" 17,	25,589	" 7,	12,986	" 28,	11,501	" 19,	9,326
" 19,	25,120	" 9,	54,194	" 30,	52,879	" 21,	70,640
" 20,	29,243	" 10,	49,697	July 1,	51,069	" 22,	68,161
" 21,	30,249	" 11,	47,756	" 2,	49,899		

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